

HARVARD MEDICAL

ALUMNI BULLETIN

FALL 1989



◆
*Days
of Wit and
Wisdom*
◆

FIND OUT HOW TO GET A MILLION-DOLLAR MANAGER FOR YOUR \$100,000 PORTFOLIO.

Select Managers is Shearson Lehman Hutton's exclusive program that can put one of 17 of the country's leading independent money managers to work for you.

These Select Managers ordinarily manage only portfolios in excess of \$1 million. But now your Select Managers' account of \$100,000 or more can be matched to a manager whose investment philosophy is most appropriate to your financial objectives and risk tolerance.

To find out how a million-dollar portfolio manager can work for you, call Shearson Lehman Hutton at 1-617-739-8704. Or return the coupon.

**SHEARSON
LEHMAN
HUTTON**

An American Express company



**MINDS
OVER MONEY.®**

CALL: 1-617-739-8704

Or write: Martin B. Stocklan Sr. V.P.
(Harvard MBA 1966)
Chestnut Hill Plaza
Chestnut Hill, MA 02167

**For Shearson Lehman Hutton
Select Managers**

☐ Please send me more information on Shearson
Lehman Hutton Select Managers.

☐ PLEASE CHECK IF YOU ARE A SHEARSON LEHMAN HUTTON CLIENT.

NAME (please print)

ADDRESS

CITY

STATE

ZIP

BUSINESS PHONE

HOME PHONE

BRANCH LOCATION

NAME OF FINANCIAL CONSULTANT

SHEARSON LEHMAN HUTTON INC. • FOSTER & MARSHALL INC. • THE ROBINSON HUMPHREY COMPANY, INC.

Member SIPC ©1988 Shearson Lehman Hutton Inc.

HARVARD MEDICAL

ALUMNI BULLETIN / FALL 1989 / VOL. 63 NO. 2

FEATURES

- 16 AIDS: The Search for New Solutions *by John Lauerman*
- 19 Making Contact: HMS/Soviet Medical Exchange *by Stephen Epstein*
- 23 Class Day
- 25 The Eccentric Pathway *by Oliver Sacks*
- 28 Principles and Priorities of Medicine *by Charles J. McCabe*
- 30 An Upstream Journey *by Gloria P. Bachelder*
- 32 "The Kindness of Strangers" *by Chris Wallis*
- 34 Alumni Day
- 35 The Healing Arts and Human Rights *by Robert Lawrence*
- 38 Ethical Education: Will Neglect Lead to Crisis? *by James E. Sabin*
- 40 A Choice Evening *by Terri L. Rutter*
- 42 Response to a Student's Suicide *by Nancy H. Kaltreider*
- 45 HMS Coleus Society Comes to Fruition *by Terri L. Rutter*
- 46 The Longing for Medicine *by Joe Rhatigan*

DEPARTMENTS

- 3 Alumni Council: President's Report *by Claire Stiles*
- 4 Letters
- 5 Pulse: Emeritus Luncheon, Medical-Legal Services Project, MD-PhD Dinner, Teaching Awards
- 8 Campaign Report: The New Pathway
- 10 Bench Marks: The Lawrence E. Martin Laboratories *by Ronald W. Lamont-Havers*
- 11 Book Marks: *Yankee Surgeon: The Life and Times of Usher Parsons, 1788-1868* by Seebert J. Goldowsky; review *by J. Gordon Scannell*. *Bag Balm and Duct Tape: Tales of a Vermont Doctor* by Beach Conger; review *by Claude E. Welch*.
- 48 Reunion Reports
- 55 Alumni Notes
- 62 In Memoriam: Bernard M. Jacobson and George Nichols Jr.
- 64 Death Notices

Cover: Joseph Edwards '34 enjoys Alumni Day. Photo by Paula Lerner.

INSIDE H.M.A.B.

Once more the *Bulletin* gives evidence that rain cannot dampen nor custom stale the spirit of Class Day/Alumni Day. With Bob Lawrence '64—home from a sabbatical year at Stanford—in the chair, the 25th-year class dealt gracefully with major concerns of Harvard alumni everywhere: Lawrence himself, with the need and opportunities for medicine to guarantee human rights; Jim Sabin '64, with the ethical problems we have created for ourselves; and Nancy Kaltreider '64, with the sometimes devastating loneliness of medical students.

The previous day, Class Day, the students chose their speakers well. Charlie McCabe, one of their most popular teachers, and a surgeon at that, described the privileges that lay ahead. Oliver Sacks (the 'wife for a hat' man), speaking from his own experience, pointed out how each must find her or his own pathway. The student speakers were positive: Chris Wallis, reflecting the literary influence of Bob Coles, spoke on the kindness of strangers, and Gloria Bachelder, on the advantages of being "disadvantaged," especially if you are from Maine. On Alumni Day, Joe Rhatigan read his Alumni Prize essay, "The Longing for Medicine" to end suffering, to heal, and be healed.

There are added attractions. A roseate insider's view of a successful exchange program with Soviet medical students by Stephen Epstein, a third-year student participant. And a report of the first meeting of the Coleus Society, which reminds us again of that extraordinary alumnus Spencer B. Lewis '73.

Finally, all thanks to John Lauerma, who came to us from *Focus* to team up with Terri L. Rutter to fill, in a cheerful and helpful way, the temporary gap left by the maternity leave of our managing editor. His interview with Anthony Fauci of the NIH on the immunology of AIDS gives us guarded optimism. It is but one small measure of what John has done for us and for which we are most grateful.

—Gordon Scannell

HARVARD MEDICAL

ALUMNI BULLETIN

Editor

J. Gordon Scannell '40

Managing Editor

Ellen Barlow

Assistant Editor

Terri L. Rutter

Editorial Assistant

Sarah Jane Nelson

Editorial Board

David Altshuler '90

Harold Amos, Ph.D.

Rafael Campo '91

Robert M. Goldwyn '56

Timothy E. Guiney '66

Emily Koumans '89

Robert S. Lawrence '64

Michael T. Myers Jr. '85

Guillermo C. Sanchez '49

Eleanor Shore '55

Richard J. Wolfe

Design Direction

Eleanor Bradshaw

Office of the University Publisher

Association Officers

Doris R. Bennett '49, president

Claire M. Stiles '56, president-elect 1

Robert M. Goldwyn '56, president-elect 2

Herschel D. Collins '52, vice-president

Roger L. Christian '66, secretary

Barbara J. McNeil '66, treasurer

Councillors

George S. Bascom '52

Preston R. Black '75

Cecil H. Coggins '58

Paul J. Davis '63

Allan L. Freidlich '43A

Bernadine P. Healy '70

Joseph K. Hurd '64

Paula A. Johnson '85

Deborah B. Prothrow-Stith '79

Representative to the

Harvard Alumni Association

William D. Cochran '52

Director of Alumni Relations

William V. McDermott '42

Chairman of the Alumni Fund

Joseph E. Murray '43B

The *Harvard Medical Alumni Bulletin* is published quarterly at 25 Shattuck Street, Boston, MA 02115 ©by the Harvard Medical School Alumni Association. Telephone: (617) 732-1548. Third class postage paid at Boston, Massachusetts. Postmaster, send form 3579 to 25 Shattuck Street, Boston, MA 02115. ISSN 0191-7757.

ALUMNI COUNCIL: PRESIDENT'S REPORT

An Active Centenarian

by Claire Stiles

In his introductory remarks on Alumni Day, Dean for Students and Alumni Daniel Federman '53 noted that although its 100th birthday nears, the Alumni Council has never been so vibrant or energetic. Indeed, there is excitement in the association over a new minority branch, a reorganized and relocated alumni office, and plans for the Alumni Association's centenary in 1990. Here is a brief summary of the activities of the spring council meeting.

The Subcommittee on Minority Alumni reported the formation of the Coleus Society, a sub-group of the Alumni Association. The society's founders, led by Michael Myers Jr. '85 and Bernard Godley '89, named the group for this resilient, multi-colored

plant that flourishes under adverse conditions.

The society's first annual luncheon, held during Alumni Week, featured the presentation of the first Spencer Lewis Award to Alvin Poussaint, HMS associate dean of student affairs, for his assistance to minority students. The society will soon begin polling minority alumni in order to produce a directory and build participation in future society activities.

The fourth annual HMS women's dinner, traditionally held in the Building A Faculty Room, moved to the Vanderbilt Hall dining room this year. Numbers necessitated the change of venue; about 60 alumnae and 100 HMS women students enjoyed dinner and a

panel discussion on "Specialty Choices for Women in Medicine."

Gathered for Alumni Day, we heard Joseph Rhatigan '92, read "The Longing for Medicine," for which he won the annual essay award. [*For the full text of the essay, see page 46.*] There were more than 20 entries in this student competition. We are encouraged by the interest in this activity and hope even more students will participate next year.

As a continuation of the council's interest in physicians' attitudes toward medicine of the future, we heard a report from E. Langdon Burwell '44, chairman of the Alumni Survey Committee. His committee is surveying current perceptions of medical practitioners regarding their chosen professions,

**The
Inn**
AT CHILDREN'S



342 Longwood Avenue
Boston, MA 02115
617/731-4700

Boston's Premier Medical Neighborhood Welcomes Boston's Premier Medical Conference Center

Where the following Longwood Medical Area Institutions meet:

Schools:

Harvard Medical School, Harvard School of Public Health, Harvard School of Dental Medicine, Massachusetts College of Pharmacy plus many more schools and Colleges.

Hospitals:

Children's, Beth Israel, Brigham and Women's, Dana Farber, Joslin, New England Deaconess, to name only a few.

The Longwood Galleria Conference Center at The Inn at Children's

A state-of-the-art Conference Center to meet the unique demands of The Medical Community. If you need to meet, we'd like to meet you here. **At The Inn at Children's.**

and is now investigating whether widespread alienation or disaffection exists with medicine as a career.

The committee is composing a written questionnaire that will initially be sent to HMS alumni, and later supplemented with personal interviews. The goal of the survey is to determine the extent of the problem, define the etiology, if possible, and suggest some solutions. Each of our alumni is encouraged to volunteer comments to the committee, whether or not personally contacted. We hope to eventually expand the survey to other medical schools. A formal report of preliminary results is expected at the fall council meeting.

The Alumni Symposium Committee, chaired by Paul Davis '63, is working closely with the Alumni Survey Committee on the problem of physician alienation. As soon as the initial results are available in the fall, this committee will begin to finalize plans for a symposium to be held in spring 1990. General areas to be covered are a definition of the problem, strategy for resolutions, and expectations for the future. We on the council are very excited about this project and hope many alumni will be able to participate in the symposium.

The council is very proud of the alumni office reorganization by Bill McDermott '42, executive director, and Nora Nercessian, associate executive director. The office has again become a vital part of the association; students working there are learning first-hand that the association is alive and interested in them. We are building a national network to help fourth-year students travel to residency interviews, elective courses, etc. The office is also a source of information for alumni visiting Boston, and has provided major support to the Coleus Society and the annual women's dinner. Activities are really on the upswing.

The alumni office is moving physically as well as philosophically. After years of crowding into a corner of the second floor of Building A, it now occupies more spacious renovated quarters on the third floor, with an elegant large lounge which visiting alumni can enjoy. We hope all will come see it at their first opportunity.

Some of you may already be aware that it has been almost 100 years since November 26, 1890, when a group of HMS alumni gathered and decided to form an association. Plans for an appropriate recognition of the Harvard Medical Alumni Association's centenary will begin this fall.

Computerization of all HMS alumni

information should be complete this summer. A new directory is planned for release about the time of the 1990 centenary.

Remember that alumni can help the School in many ways. For example, all of you can become part of the national network to help students travelling around the country. We are also trying to establish better communication between the Council and alumni around

the world. A few regional HMAA groups have been formed, but with limited success. Any ideas you can contribute would be greatly appreciated.

Our best wishes to all of you. □

Claire Stiles '56 is professor of clinical anesthesiology at the University of Southern California School of Medicine and teaches anesthesia at the Rancho Los Amigos Medical Center.

LETTERS

Birthmark Breakthrough

Thanks to two Harvard dermatologists and their collaborators, the type of crimson birthmark that afflicted Charles William Eliot (Spring 1989 *Bulletin*) is now easily treatable with a newly developed laser. In 1981, R. Rox Anderson, '84, (then a second-year student and now assistant professor of dermatology at HMS) and John A. Parrish, now chairman of the Department of Dermatology at HMS, hypothesized that a sufficiently short and intense pulse of laser radiation at a wavelength that would be absorbed by red blood cells might cause precise and selective damage to the blood vessels in port-wine stains. This idea led them to develop the pulsed tunable dye laser and to the concept of selective photothermolysis (*Science* 220: 524-527, 1983). Tunable dye laser treatment is safe and effective even in children (*NEJM* 320: 416-421, 1989).

In his superb article on Harvard president Charles William Eliot's crimson birthmark, John Mulliken speculates that it may have "caused him to be particularly interested in medical education." How pleased Eliot might be to know that a student and a professor at the medical school whose destiny he so profoundly altered have invented a treatment for the skin lesion that so affected his life.

—Jeffrey D. Bernhard, '78

Dreams to Show and Tell

Nicole Rebecca Landzberg, daughter of Michael Landzberg '85, shown celebrating her fourth birthday in your Spring 1989 *Bulletin*, told me today that she is going to bring that *Bulletin* to her "show and tell" class at school. She also told me, however, that she would tell her class that she is going to be a teacher and a dancer as well as a doctor. After reading "Karol Watson '89: Making Time for Dance" in the same issue, I realize that a four-year-old's "impossible dream" can come true.

—Sol Landzberg

In Closing . . .

I very much enjoyed reading the Spring edition of the *Bulletin* devoted to the pursuit of physical fitness. It is perhaps noteworthy that this issue appeared, coincidentally, with the closing of the athletic facilities in Vanderbilt Hall—by far the most convenient place for medical-area residents to keep fit. I think that there is a message to all this but I'm not sure what it is.

—James F. Riordan



E. Pierson Richardson '43A, Francis Moore '39 and Oliver Cope '28 at the Emeritus Luncheon.



James Stillman '32 catches up with Gustav Dammin.

Old Friends, Young Science

Like old wine, the Emeritus Faculty Luncheon seems to get better every year. A bright taste of late May weather greeted 70 laughing, gossiping and hobnobbing faculty and spouses, who gave one another their latest news and remi-

nised about days gone by. Charles Davidson, William Castle Professor of Medicine, *Emeritus*, recollected his years at the Thorndike Laboratory, where he worked under his chair's name-sake. Louis Zetzel '34, clinical professor of medicine, *emeritus*, fondly recalled the fledgling years of the Beth Israel Hospital, when he was one of the first house officers to train there.

After tea in the Building A lobby, the party proceeded to the Faculty Room for lunch and a greeting from Dean Daniel Tosteson, who reported on the progress of medical education at the school. All HMS students are now members of one of the five academic societies—Walter B. Cannon, William B. Castle, Oliver Wendell Holmes, Francis W. Peabody, and Health Sciences and Technology—and in June, the first students to enter the first society, the Holmes, graduated.

The main event on the program was an informative lecture from Michael Gimbrone '69, Elsie Friedman Professor of Pathology. The talk, entitled

"Vascular Endothelium, Nature's Blood Container," detailed Gimbrone's work at Brigham & Women's Hospital in identifying the role of one of the body's least-understood "organs."

A single-cell-thick lining for the cardiovascular system, the vascular endothelium is more than just a sturdy tube; endothelial cells act as a "gate" between blood vessels and the tissues they serve, and secrete biologically active substances. Using innovative techniques, Gimbrone and his colleagues found a way of isolating endothelial cells from the human umbilical vein so they could be grown in a petri dish and studied.

With the ability to observe endothelium closely, Gimbrone came to view these cells collectively as an endocrine organ, with some unexpected functions, such as the secretion of intercellular messengers. He and his colleagues have identified a protein, called ELAM-1 (endothelial leukocyte adhesion molecule-1) that appears to be important in the inflammatory response. When endothelial cells are stimulated with interleukin-1, they display ELAM-1, which encourages leukocytes to stick to the blood vessel wall.

Gimbrone pointed out that if endothelial surface proteins such as ELAM-1 play a part in thrombus formation, blocking their action could represent a way to treat heart attacks, strokes and other unwanted vascular events.

ITALY. CASTLES IN THE SKY—
or villas in the vineyard. The best
city or country rentals all over
ITALY. American specialist based
in **ROME** will help design
the perfect holiday.

INTERNATIONAL SERVICES

Piazza di Spagna 35, 00187 Rome, ITALY,
tel. (011-39-6) 474-6439.
In U.S., tel. 212-794-1534.

Before closing the session, Dean Tosteson applauded Gimbrone's work. "I could not think of a better story to get across what is happening in medicine today. It is a full display of 'molecular medicine.'" □

More Than the Doctor Ordered

Many patients need more than just an accurate diagnosis and a prompt prescription to cure their ills; they may need food or shelter or any of a variety of services. In addition, they may need information about how those services can become available to them.

With this thought in mind, students and faculty from both the Harvard Medical School and the Harvard Law School have developed a new program called the Medical-Legal Services Project (MLSP), whereby medical and law students work together to learn the basics of public assistance programs so they can advise their patients who need them.

According to MLSP director JudyAnn Bigby '78, an instructor in medicine at Brigham and Women's Hospital, "There is a persistent disparity between the health status of the general population and the poor, and there is growing awareness that social factors can affect one's state of health.

"What frustrates physicians," she continues, "is that they may well recognize that their patients do not have an adequate monthly income, but they do not know how to go about maximizing benefits."

Incorporated into MLSP is a new course for first- and second-year medi-



Law student Sally Kaplan does research for her clients from home.



Colleen Buggs '92 talks with Alice Fonseca, a paralegal at the Legal Services Center.

cal and law students called Social Factors and Health Status: Medical and Legal Perspectives. The course, taught by program founders Bigby; Howard Hiatt '48, professor of medicine; Gary Bellow, Harvard law professor; and Jeanne Charn, Harvard lecturer on law

and clinical director of the Legal Services Center in Jamaica Plain, Massachusetts, focuses on how economic and legal factors affect a person's health. Through the course, students learn the ins and outs of welfare, food stamps, disability payments and other programs. Bigby says that it's important for future professionals to know of these services and to understand the bureaucracy involved in administering them. Many low-income patients either aren't aware of the available assistance programs or don't understand how to apply for them.

The course is divided into two parts: clinical and class work. In the clinical component, students evaluate individual patients and clients through interviews. Peggy Plews-Ogan '91, who is taking time out from medical school to coordinate this project, supervises. During the interviews, students assess patients' needs and inform them about the public assistance programs available to them. Frequently, a law student and a medical student will work together to assist a patient applying for food stamps, for example, or act as a medium between a patient and a problematic landlord.

Time in the classroom is spent learning about the different forms of public assistance available, the required paperwork to obtain such assistance and in-depth discussions about the interaction and cause-and-effect relationships between health and social concerns in society. Students then attempt to design a social welfare system that might serve society more appropriately. At the end of the course, each medical/law student pair is required to write a brief description about a particular assistance program to be included in a reference manual being prepared for physicians.

Participants hope that MLSP will have far-reaching effects for future medical and legal communities. "My hope is that [MLSP] can be introduced into the regular teaching program for medical residents, medical students, and lawyers. In fact, I hope this program will be replicated widely throughout the country," says Hiatt. □

Well Deserved Farewell

It was a wonderful event for eight MD-PhD students who spent their last evening at Harvard Medical School in the company of their families, faculty, peers and well-wishers. While serenaded by a musical trio, they enjoyed a farewell dinner in the Medical Education Center atrium, some of them at the end



Faculty and staff for MLSP: Jeanne Charn, Howard Hiatt, JudyAnn Bigby, Peggy Plews-Ogan, Cathi Sonneborn, and Gary Bellow.

of eight- or ten-year journeys that had taken them through laboratories and wards throughout the Medical Area and beyond.

Bernardo Nadal-Ginard, director of the MD-PhD program, saluted the students and the unique contributions they offer to medicine. "Through the physician-scientist," he said, "medicine has come into its true partnership with the basic sciences."

"You are doing what this medical school is all about," added Dean Daniel Tosteson. "We are very pleased with your accomplishments and look forward to your discoveries of the future."

After dinner, the students were addressed by George W. Thorn, chief of medicine at the Peter Bent Brigham Hospital from 1942-1972, and currently chairman of the Howard Hughes Medical Institute (HHMI) board of trustees. A 1929 graduate of the University of Buffalo Medical School, Thorn noted that things have changed drastically for the physician-scientist in 60 years. In the sixties and seventies, there was more support for this dual career. In the eighties, however, funding has dried up for doctors wishing to devote the majority of their time to research.

The dedication of MD-PhDs keeps a valuable tradition alive: Thorn said, "No department of medicine can be first-rate without the presence of physician-scientists." Thorn pledged the continuing support of HHMI to these researchers.

Ten MD-PhD students graduated this year: William R. Bishai, Lewis A. Chodosh, Stuart A. Forman, Bernard F. Godley, Anula K. Jayasuriya, Lloyd B. Klickstein, Richard F. Selden, Philip A. Starr, Lincoln D. Stein and Patricia A. Thistlethwaite. □

The Students' Choice

The tradition of rewarding teachers for their lasting impact on the lives of students continued this year as five teaching awards were presented to HMS faculty members.

Daniel Goodenough, the Takeda professor of anatomy and cellular biology, received the prize for first-year teaching. Goodenough was course director of histology, organized the New Pathway's Human Body block, and has been a master of the Oliver Wendell Holmes Society. Under a column on the evaluation form labeled "outstanding qualities," one student wrote, "He has them all."

Assistant professors of medicine Christopher Fanta and James H. Maguire



HMS Teaching Award winners James Maguire '74, Christopher Fanta '75, Daniel Goodenough and Arthur Boland.



Robert Stone teaching award winner George Kurland '43B.

also received prizes. Fanta was given the award for excellence in second-year teaching. Students praised him not only for his clear presentation of material, but for his personal qualities of com-

passion, warmth, and approachability. Maguire was honored for third-year teaching. He has taught a variety of courses in infectious diseases and parasitology, as well as a clerkship in general medicine. Of Maguire, one student wrote, "Contact with Dr. Maguire shows how well a physician can combine the art and science of medicine."

Arthur Boland, assistant professor of orthopedic surgery, received the fourth-year prize. His involvement in the orthopedic clerkship won student praise for his gentle and patient manner, and for his skills both as a surgeon and teacher. "My life would have been much different had it not been for Dr. Boland," wrote one student.

Professor of Medicine George Kurland received the Robert Stone Award for Teaching at Beth Israel Hospital. One student described Kurland as "one of BI's greatest assets." Kurland has participated in a wide range of clinical courses. □






handwoven rugs
orients • kilims • dhurries
tapestries • folk art





decor international
171 newbury street • boston • 262-1529

CAMPAIGN REPORT

The New Pathway

On June 8, the first HMS students to enter the New Pathway graduated from Harvard Medical School, representing a milestone in medical education. Twelve of the original 24 students who enrolled in the program four years ago picked up their diplomas on the way to residency programs across the country. The remaining students have delayed their graduations in order to conduct research or participate in community assistance programs.

The New Pathway has evolved from an innovative program introduced in 1985 by Dean Daniel Tosteson to its current status as an integral part of

education at HMS. Problem-based learning and the institution of the academic society, both pioneered in the New Pathway with the Oliver Wendell Holmes Society, have been extended to the entire student body. Each HMS student now belongs to either the Holmes, Francis W. Peabody, Walter B. Cannon, William A. Castle or Health Sciences and Technology society for all four years at the School.

The Patient-Doctor Relationship course, another innovation of the New Pathway, has become a staple of the HMS student's education. The problem-based Patient-Doctor curriculum aims to bring the student's knowledge of disease past the realm of diagnosis and treatment, and into that of caring for the patient as a whole person. Like the academic societies, the Patient-Doctor course continues longitudinally through the curriculum and prepares students for increasing involvement with patients.

There are many other ways in which the New Pathway has contributed to everyone's education at HMS. In January 1988, a group of Holmes Society students organized a faculty-supervised visit to the Philippine islands of Mactan and Pangasinan where they surveyed respiratory health parameters, vaccinated children, and built health centers and sanitary facilities. Since then, similar class projects have been organized: an exchange program with students from Soviet medical schools took place in January and April of 1989; and another health survey has been planned in the Dominican Republic in July.

At a recent meeting of the National Alumni Committee and the National Campaign Committee, graduating New Pathway students Marc Silver and Dawn Marie Wadle talked about their experiences in the developing program, debunking some of the myths about New Pathway education, and confirming other impressions observers had formed.

"It's hard to express in a few words how happy I was with this program," Silver said. "Although I'm sure I would

have profited and learned a lot in the old, 'classic' curriculum, I leave here more excited about medicine—given all the worries about malpractice, about financial problems and about physicians' decreasing control over medicine—I leave much more excited than when I walked in. I think I will always look back on these four years of medical school as an exciting and stimulating and challenging time.

"I don't think I came to medical school thinking that was the way it was going to be. I thought it would be much more draining than it was, and much less interesting and intellectually challenging. I thought we'd be stifled, and fortunately I don't think that ever happened."

A popular myth about the New Pathway, Silver said, is that students do not learn any science. However, he found that students in the program argued over small details of the basic sciences for weeks, and some discussion continued even into the third and fourth years.

"There was a lot of basic science," Silver said, "It was mixed up with clinical science, and that was some of the beauty of the first two years of medical school."

"Some people liken the New Pathway to Swiss cheese: very solid in places but with lots of holes. The classic curriculum, they say, is like cheese spread; it's thin, but it covers everything. I think the New Pathway is a nice solid block of Swiss cheese without the holes."

Wadle recounted a story that showed how the New Pathway format encouraged her and other female students to reaffirm their commitment to learning basic science. The women felt they were less welcome to participate than male students in basic science classes, since these studies have long been considered a male bastion. After extended discussions with peers and professors, they opted to form their own basic sciences block.

The idea was a great success. The

Attention Physicians

Hagerstown, Maryland, a city of 40,000, in scenic and historic western Maryland, an hour from Washington, D.C. and Baltimore, needs Family Practitioners.

Washington County Hospital, a 317-bed Regional Trauma Center serving 140,000 patients, will assist physicians in locating their practices here. The hospital offers solo practice assistance including income guarantee for the first year, loan provisions and assistance in securing office space. The hospital also offers contractual relationships including competitive salaries and provisions for practice buyout at physicians' options.

Hagerstown offers high quality, family-oriented living with easy access to cultural and educational opportunities.

Privileges on hospital staff will be granted according to training and experience. Applicants must be BE or BC.

Reply to: Brooks McBurney
Vice-President, Personnel Services
Washington County Hospital Association
251 E. Antietam Street
Hagerstown, MD 21740 (301) 790-8505

The School continues to seek additional funds to meet the challenges that still exist. These include making the academic societies an organic part of the teaching environment, active in ongoing design and implementation of the curriculum. While faculty members have accepted the increased time in the classroom necessitated by small-group teaching methods, there are ongoing

The importance placed by Dean Tosteson on this major curricular reconstruction, the action of the faculty of medicine in approving it, and the support given by President Bok, who has stated, "This may well turn out to be Harvard's most impressive innovation in the 1980s," all testify to the institutional value placed on the New Pathway. Support from the alumni can only help the quality of teaching at HMS to move forward. □

The Campaign reached \$137.2 million in gifts and commitments as of June 30, 1989. The Campaign goal is \$185 million.

BENCH MARKS

The Lawrence E. Martin Laboratories

by Ronald W. Lamont-Havers

The Lawrence E. Martin Laboratories (LEM Labs) are the newest addition to the Massachusetts General Hospital's research facilities. Named after Lawrence E. Martin, the deeply respected associate general director of the MGH and a staff member since 1949, the laboratories were dedicated in December 1988 at a ceremony in the main atrium of Building 149 in the Charlestown Navy Yard where the new labs are located. Currently occupying about 197,000 usable square feet in Building 149, the laboratories are expected to finally occupy some 306,000 square feet. In comparison, the research laboratories built on the main campus of MGH during the past 180 years total some 270,000 net square feet, primarily spread over four buildings, with scattered research facilities in five others.

For some time, the major constraint on the growth of research at the MGH has been a shortage of space rather than a lack of either funding or investigators. By 1983, it was obvious to the trustee-appointed long-range planning committee for research that facilities for the needed expansion of research space had to be sought off the main campus. Any further major construction on campus would have to be reserved for the hospital's clinical activities. While a number of solutions were examined during 1983 to 1986, none met the needs of the research community.

In 1986, a discussion between J. Robert Buchanan, MGH general director, and Neil St. John Raymond, of the Raymond Group of developers, led to the consideration of Building 149. Raymond, who had donated Halcyon Place on Commonwealth Avenue to the hospital as a lodging facility for the families of children who are being treated for cancer at MGH, knew the hospital well. In addition, his company had

undertaken the rehabilitation of parts of the Charlestown Navy Yard after it had been abandoned by the federal government. One of the primary structures to be renovated was Building 149, a massive warehouse built primarily during World War I. It consisted of eight floors of some 75,000 gross square feet each, (by comparison, a football field contains 45,000 square feet) and two top half-floors with large, natural light-filled atria at either end. By the end of 1986, the hospital agreed to lease the fifth through eighth floors for research, and the two top half-floors for a computer center and administrative space. Martin, who had been involved in every major building project of the hospital during the past 30 years, was given the responsibility of overseeing the acquisition of the lease and assuring the occupancy of the space.

Planning for occupancy of the space began in earnest in January 1987, with the expectation that the first research units would be able to move in by the summer of 1988. While originally only the seventh and eighth floors were to be occupied immediately, demand for space dictated that the fifth and sixth floors should also be converted into laboratories at the same time. Soon afterward, it was also decided to occupy parts of the first and second floors for clinical and research purposes. Finally, in the fall of 1988, it appeared that there was sufficient demand for research space that occupancy of the whole building was considered.

Traditionally, the largest component of the MGH research programs had been within the Medical Service. As a result, there had been a chronic shortage of space and marked overcrowding in those laboratories. Thus, Medicine, under its chairman, John Potts, along with Stephen Krane, then chairman of the MGH Committee on Research, was one of the first services to realize the

potential of acquiring space in Building 149 and how it could be used to meet the needs and goals of not only the Medical Service but also the hospital as a whole. Nearly 50,000 square feet on the eighth floor (the first to be finished) was assigned to Medicine, with an additional 10,000 square feet designated for a small animal facility. This floor and the seventh have the added attraction of a spectacular view of the Boston Harbor and the downtown skyline.

The laboratories now situated on the eighth floor are those of the Diabetes Unit under Joseph Avruch, the Renal Unit under Dennis Ausiello, Medical Oncology under Thomas Stossel '67, the Lovett Group for Arthritis Research under Stephen Krane, and the Pulmonary Unit under Homayoun Kazemi.

The seventh floor houses the MGH Cancer Center. The hospital had long considered the need to establish a comprehensive center which would combine the excellence of the Cox Cancer Center, which is primarily devoted to ambulatory clinical care, with a comprehensive cancer research program. The space in Building 149 made the realization of this dream possible. The MGH Cancer Center was formed in the fall of 1987 with Kurt Isselbacher '50 as director. Over 65,000 square feet on the seventh floor of Building 149 was allocated to the research activities of the center.

The relationship of the new center to the other services and departments within the hospital, and to the academic counterparts within HMS, was a new venture for MGH. Professional staff have hospital appointments in the center, as well as in one of the clinical services or departments through which they achieve their academic appointments at HMS.

While the cancer center encompasses all the clinical and research cancer-related activities within the hospital, the part within the LEM Labs concentrates primarily on the more basic aspects of cancer investigation. Two units at the main campus have been shifted to Building 149 and enlarged: the G.I. Oncology Unit under Sebastiano Gattoni-Celli, and the Molecular Hepatology Unit under Jack Wands. Two new units were established; one on immunogenetics and the other on molecular genetics. Also on the seventh floor is the Pathology Unit under James Kurnick, and a conference room with seating for 100. In the MGH Cancer Center, approximately 22,000 square feet remain to be developed as

Isselbacher continues to enlarge the scope of the cancer center's research.

Since the 1960s, there had been a conviction within the hospital that the basic research goals and interests of the clinical disciplines of neurology, neurosurgery and psychiatry should be considered together as part of the neurosciences. The establishment of the LEM Labs enables this concept to be realized. The 70,000 square feet on the sixth floor of the building were designated as a neuroscience center under the direction of Joseph Martin. A large number of laboratories was constructed with additional space for set-aside expansion. This floor now houses the Molecular Neurobiology Laboratory under Michael Comb, the Laboratory of Neuroendocrinology under Joseph Martin, the CNS Growth Factor Research Laboratory under Seth Finkelstein, the Cecil B. Day Center for Neuromuscular Research under Robert Brown '75, the Molecular Neurogenetics Laboratory under James Gusella, the Center for Morphometric Analysis under Verne Caviness '62, the Laboratory for Pain Research under Charles Poletti, the Pain Physiology Laboratory under Raymond Maciewicz, and Laboratory of Cellular Neurobiology under Marion DiFiglia. The Kennedy Laboratory for Developmental Neurobiology, also under Caviness, and the Kennedy Laboratory for Hereditary Metabolic Disorders, under Vivian Shih, were moved from the main campus to the Neuroscience Center. The total amount of research space devoted to neurology, neurosurgery and psychiatry at the MGH is about 90,000 square feet; of this, about 53,000 square feet will be in Building 149.

A large area off the smaller northeast atrium has become the MGH Magnetic Resonance Imaging Center to serve the needs of the ambulatory patients of the MGH, and to house the NMR Research Unit under Thomas Brady.

The establishment of the LEM Labs, and the other facilities in Building 149, raised fears, concerns and doubts within the MGH research community. The hospital has always cherished the idea of direct, integrated continuity between clinical practice at one end of the spectrum and the most basic research at the other end, with training being an important aspect throughout. The individual who was both a clinician and a laboratory-based investigator was encouraged and nurtured. By and large, principal investigators were predominantly MDs.

The structure and geographic separation

of the LEM Labs challenged these concepts and self-image. There were early concerns that every effort must be made to ensure that the activities of the two campuses be integrated so that an independent basic research institute divorced from the activities at the MGH complex did not emerge. Efforts to avoid this are a continuing source of discussion and will require the close attention of the leaders within the research community. Although trips to and from the LEM Labs must be coordinated with a fixed shuttle schedule of every 30 minutes, the shuttle ride between the two campuses has effectively addressed a portion of the concern about physical separation: it requires usually less than 15 minutes, even in the worst traffic.

The mix of the types of investigators at the MGH is also changing. At the LEM Labs, a greater number of PhDs are being recruited. This, in turn, is accentuating the problem of the academic appointments of PhDs in clinical departments at HMS, a recurring theme

for discussion by the MGH Scientific Advisory Committee since its first meeting in 1948. The problem is the overwhelming need to have the basic science departments of the medical school more intimately involved in the recruitment and the academic appointment of PhDs, as well as the placement of graduate students, in hospital-based laboratories. This brings to the fore once again these longstanding issues which are being explored with a new sense of urgency.

The great changes occurring in research at MGH are epitomized by the LEM Labs. The hospital's new venture will enable it to meet the exciting challenges for patient care and research in the nineties, and prepare for the even greater challenges in the 21st century for teaching hospitals and universities. □

Ronald Lamont-Havers is Director of Research Affairs at Massachusetts General Hospital.

BOOK MARKS

A Wartime Residency

by J. Gordon Scannell

YANKEE SURGEON: THE LIFE AND TIMES OF USHER PARSONS, 1788-1868, by Seebert J. Goldowsky; Countway Library, Boston, 1988.

Usher Parsons' medical career began with a bang—the crucial naval victory in the War of 1812, known as the Battle of Lake Erie. In January 1814, six months after the event, Commodore Oliver Hazard Perry reported to the secretary of the navy:

Of Dr. Usher Parsons, surgeon's mate, I cannot say too much. In consequence of the disability of both of the other surgeons, Drs. Horseley and Barton, the whole duty of operating, dressing and attending nearly a hundred wounded and as many sick, devolved entirely on him; and it must be pleasing to you, sir, to reflect that, of the whole number wounded, only three have died. I can only say that, in the event of my having another command, I should consider myself particularly fortunate in having him with me as a surgeon.

At the time of the battle, Usher Parsons was 25 years old; it would be another five years before he would receive his MD degree from Harvard Medical School. He had followed an unusual pathway in his medical education, here recounted with skill and diligent scholarship by Seebert J. Goldowsky '32, lecturer in surgery, *emeritus* at Brown, and current editor of the *Rhode Island Medical Journal*. How the young Usher Parsons came to be the sole surgeon for the U.S. fleet in one of the decisive naval engagements in the War of 1812 is a book in itself. Yet in this excellent biography it is just a prelude, albeit an exciting one, to the life of one of Harvard's unsung—at least almost everywhere but Rhode Island—and illustrious alumni.

Parsons was born in Alfred, Maine in 1788 to a family that would have been comfortably prosperous were there not nine children to educate. Having made the decision to practice medicine at age 19, Parsons entered the office of



Usher Parsons as a young man.

Abdiel Hall, a practitioner in Alfred. To supplement his apprenticeship, Parsons attended a series of lectures by Alexander Ramsey at the Anatomic Institute in Fryeburg, Maine.

Ramsey was an irascible but brilliant Scottish physician. He was a superb anatomist, trained in Edinburgh with Munroe and later in London with the Hunters. Ramsey came to America in 1801 with the intention of founding an institute of anatomy in the wilderness. It appears that Parsons' Fryeburg experience led him to decide to earn an MD degree and someday to teach.

In 1811, therefore, Parsons came to Boston to enter the office of John Warren, first professor of anatomy and surgery at Harvard and a founder of its medical college. Denied service as a line officer, Warren had gained extensive experience with military medicine and the wounded in the hospitals of the Continental Army. On his return to Bos-

ton after the Revolution, he developed an impressive teaching practice of surgery. Goldowsky's lively description of Warren's practice is fascinating. The author includes such descriptive details as the anatomic and amputation specimens (which later became the nucleus of the Warren Museum), hanging out to dry in a back room.

In 1812 the United States, not yet 25 years old, was caught between the British and Napoleonic millstones. U.S. mercantile interests and national honor were being threatened by the British Orders in Council, which had blockaded commerce with European ports under French domination and allowed the impressing of American seamen. Spurred on by American warhawks largely from outside New England, who saw this as an opportunity to twist the lion's tail by seizing Canada, President Madison declared war, unaware that Britain had already rescinded the offending orders

in Council. Such a communication delay was characteristic of this stalemate war in which the greatest battle—New Orleans—was fought after the peace agreement had been signed.

To young Parsons, war meant an opportunity to increase his clinical skills as a basis for future practice. He promptly signed up for the New Hampshire militia. Although this failed to produce a military commission, it brought him to the attention of New Hampshire Congressman Josiah Bartlett, who in turn recommended him to the secretary of the navy. Finally, on July 10, 1812, Parsons was commissioned surgeon's mate in the U.S. Navy.

A month later the epic victory of the *Constitution*—indelibly christened "Old Ironsides" by Oliver Wendell Holmes—over the *Guerrière* was cheering news which offset an unfortunate series of disasters to American forces north of the Canadian border.

It soon became evident that the strategic key to the war along the northern border lay in the control of Lake Erie, where neither Britain nor the United States had significant naval forces. A race to build comparable fleets followed—the British near Detroit and the Americans near Erie and Buffalo. Parsons was stationed near the latter for nine months during the building of the U.S. fleet. In August 1813, he was assigned to the flagship of fleet commander Oliver Hazard Perry, a 28-year-old Rhode Islander of Quaker stock.

The historic engagement of the two fleets occurred on September 10, 1813. The *Lawrence*, Perry's flagship, suffered heavy damage but survived to receive the surrender of the British fleet. "We have met the enemy and they are ours. Two ships, two brigs, one schooner, and one sloop," was Perry's laconic report to General Harrison, a report that is enshrined in every school book of American history.

Parsons' account of the battle, written almost 29 years after the event, is based on his own diaries and sharp personal memories. Here are a few excerpts of that account, which stands as an accurate historical document.

[On] the evening of the 9th of September [1813] . . . we anchored in Put-in-Bay. On the following morning at sunrise there was a cry from the masthead, "sail ho!" All hands sprang from their berths, and ere we could dress and reach the decks the cry was repeated again and again, until six sail were thus announced. Signal was made to the fleet, "Enemy in sight! Get under way!" and the hoarse voice and shrill pipe of the boatswain resounded through all the ships, "all hands up anchor."

The wind at this time was from the southwest, light and baffling, which prevented our weathering the island in our way, and it continued so until ten o'clock [AM], when it veered to the southeast, which enabled us to clear the island [South Bass Island, the site of Put-in-Bay], and stand out upon the lake. We now discovered the English squadron, five or six miles to the leeward, hove to in a line, and equidistant about a half cable's length. The vessels were freshly painted, and their red ensigns gently unfolding to the breeze, they made a very gallant appearance. [It was now a "clear pleasant day".] Our squadron bore down to engage them, with the wind on our larboard quarter. . . .

The Commodore next produced the burgee, or fighting flag, hitherto concealed in the ship. It was inscribed with large white letters upon a blue ground, that could be read throughout the fleet, "DON'T GIVE UP THE SHIP"—the last words of the expiring Lawrence and now to be hoisted at the masthead of the flagship bearing his name. A spirited appeal was made to the crew assembled upon the quarterdeck, who returned three cheers that were repeated along the whole line of our vessels, and up went the flag to the top of the fore-royal.

The Commodore brought me a package of papers, having a piece of lead attached to them, and gave orders in the event of his falling, to throw the papers overboard; they were instructions from [the] Government, and letters from Mrs. Perry.

The grog ration being served out, drums and fifes struck up the thrilling air, "all hands, all hands, to quarters," calling all to their respective stations. . . .

Every preparation being made, and every

man at his post, a profound silence reigned for more than one hour—the most trying part of the whole scene. It was like the stillness of the atmosphere that precedes the hurricane. The fleet moved on steadily till a quarter before Meridian [11:45 AM], when the awful suspense was relieved by a cannon shot aimed at us from the flagship *Detroit*, one mile distant. It was like an electric shock, and was soon followed by another . . .

The wounded began to come down before the Lawrence opened her battery, and I for one felt impatient at the delay. In proper time, however, as it proved, the dogs of war were let loose from their leash, and it seemed as though heaven and earth were at loggerheads. For more than two hours little could be heard but the deafening thunders of our broadsides, the crash of balls dashing through our timbers, and the shrieks of the wounded. These were brought down faster than I could attend to them, farther than to stay the bleeding, or support the shattered limbs with splints, and pass them forward upon the berth deck. Two or three were killed near me, after being wounded. . . .

When the battle had raged an hour and a half, I heard a call for me at the small skylight and stepping toward it I saw it was the Commodore, whose countenance was as calm and placid as if on ordinary duty. "Doctor," said he, "send me one of your men," meaning one of the six that were to assist me, which was done instantly. In five minutes the call was repeated and obeyed, and at the seventh call I told him he had them all. He asked if any could pull a rope, when two or three of the wounded crawled upon deck to lend a feeble hand in pulling the last guns. When the battle was raging

most severely, Midshipman Lamb came down with his arm badly fractured. I applied a splint and requested him to go forward and lie down; as he was leaving me, and while my hand was on him, a cannon-ball struck him in the side, and dashed him against the other side of the room, which instantly terminated his sufferings. Charles Pohig, a Narragansett Indian, who was badly wounded, suffered in like manner.

The war officially ended with the Treaty of Ghent, signed December 24, 1814. Parsons stayed in the military to serve again under Perry aboard the new ship, the *Java*, cruising in the Mediterranean. In 1817 to 1818, while on inactive duty awaiting orders, Parsons managed to complete his formal education by attending a series of lectures at the Massachusetts Medical College (now called Harvard Medical School). He received his degree of Doctor of Medicine from Harvard in March 1818.

Within a few months, Parsons was back in the navy aboard the *Guerrière* for an extended European tour of duty. During the latter half of 1819, his grand tour of Italy, France and Britain gave him access to the medical elite in Paris. Returning to the United States in early 1820, he promptly settled in Providence, Rhode Island, where within a few years he assumed a leadership role as professor of surgery and anatomy at Brown until its medical school came to an abrupt halt in 1828.



Engraving of the Battle of Lake Erie as depicted by John M. Niles in *The Life of Oliver Hazard Perry*, 1820.

In 1822 Parsons married Mary Jackson Holmes, the older sister of Oliver Wendell Holmes. The marriage was a happy one as he busily set about establishing his professional and academic position in Providence. In 1823 their son and only child, Charles, was born. Less than two years later Mary Parsons died, possibly in an eclamptic convulsion, while visiting her parents in Cambridge. Usher Parsons never remarried. He arranged for Charles to be brought up in the Holmes family, almost as a younger brother to Oliver Wendell Holmes. Like his father, Charles eventually became a leader in Rhode Island medicine and professor of physiology at Brown. The relationship between father and son was always close; indeed Charles was Usher Parsons' principal biographer.

Usher Parsons was to Providence what John Warren and John Collins Warren were to Boston—surgeons of great ability and wide experience, literate and articulate, public spirited and responsible. In due course, Parsons was a founder of the Rhode Island Medical Society and later the Rhode Island Hospital. He wrote prolifically, winning four Boylston and one Fiske prize for essays on medical topics. His original contributions drew heavily from his early naval experience or were careful observations of individual cases in his practice. Second only to his *Battle of Lake Erie: A*

Discourse is his important treatise, *Physician for Ships*, a widely read manual which went through five editions, the last published just after his death.

In later years, quite in conformity with his time, Parsons indulged his local historical and genealogical interests by producing a creditable biography of his great-granduncle, Sir William Pepperell, hero of the Capture of Louisburg. Parsons also traveled widely in the eastern United States, particularly in connection with the fledgling American Medical Association. In addition to teaching anatomy at Brown, he taught at Dartmouth and Jefferson Medical College.

Parsons' biography, according to its author, is the product of 30 years of devoted editorial pursuit of information seasoned with personal admiration. There is a great deal of source material, and much of great antiquarian interest. At the same time, the book is a splendid account of surgery, both military and civilian, in the first half of the 19th century. It is liberally annotated; however, the references are gathered at the end of each chapter and do not interfere with the narrative. □

J. Gordon Scannell '40 is editor of the Harvard Medical Alumni Bulletin.

Balm for the Spirit

by Claude E. Welch

BAG BALM AND DUCT TAPE: TALES OF A VERMONT DOCTOR, by Beach Conger, MD. Little Brown and Co., Boston, 1988.

At last a physician has written a book that is a pleasure to read and is not concerned with ego aggrandizement. Surprisingly, it was written by a graduate of Harvard Medical School, Class of 1967. After a somewhat unorthodox and unpleasant experience in practice in Berkeley, California, Conger returned to Vermont, where he had spent a portion of his boyhood, to become a doctor in a small town. Here he viewed the inhabitants, his patients and colleagues with a critical and analytical eye.

This small volume, an elaboration of entries in his diary, provides an engaging series of unique descriptions and essays. The title of the book—*Bag Balm and Duct Tape*—refers first to the famous ointment that is alleged by its enthusiastic supporters to cure all dermatologic disorders in woman, man or cows; the value of duct tape in humans is not made clear. What does become apparent is that when one wipes the bag balm off a Vermonter, he finds solid marble beneath; this marble is not likely to be influenced significantly by anything a doctor can do. Instead, the physician becomes converted to the philosophy of the native. If the patient wants to live, he will take the medicine; if he wants to die, the physician is expected to support this decision.

However, the book is far more than a series of amusing, delightfully written

tales. In many of the chapters the author records his reactions to the incidents he describes. His philosophy of life, as modified by the rock-ribbed natives, ties the book together. With the characteristic modesty that leads him to eschew the doctor's white coat as a status symbol, Conger prints all of these subjective remarks in italics so that such passages can be skipped by the reader if so desired.

The author must have given a great deal of thought to the arrangement of the chapters because they vary in their dramatic impact. One particularly intriguing example is about a woman who, having broken all the laws that guarantee long life, lived to an old age, decided when she wanted to die and did so without regret. This tale would have been a fitting conclusion to the book. In a similar fashion, Mussorgsky was an observer who described his impressions in music. His *Pictures at an Exposition* concludes with the stirring arpeggios and clashing cymbals that describe the great golden gates of Kiev. Conger's arrangement, on the other hand, maintains a comparatively even tenor that comes to no decisive end. The reader is left with the impression that life in Vermont will go on endlessly in the same way, generation after generation.

Read it, you'll like it. □

Claude E. Welch '32 is a clinical professor of surgery emeritus at Massachusetts General Hospital and was president of the Alumni Council in 1972.

M O V I N G ?

Please send out this form and send to:

Harvard Medical Alumni Bulletin
25 Shattuck St.
Boston, MA 02115

Name/Class

Telephone

Old address (or attach mailing label)

New address

There's no free lunch. But The Committee on Alumni Fellowships calls the attention of all alumni to several fellowships exclusively available to HMS alumni.

Alumni Fellowships Available
Applications Invited for 1990-91

THE WILLIAM O. MOSELEY JR. TRAVELLING FELLOWSHIP

The bequest of Julia M. Mosely makes available fellowship funds for graduates of Harvard Medical School for postgraduate study in Europe. The amounts awarded for stipend and expenses are determined by the specific needs of the individual.

Additional monies are available to provide a second research fellowship that does not require overseas travel.

The Committee on Fellowships gives preference to those Harvard Medical School graduates who:

1. Have already demonstrated their ability to make original contributions to knowledge.
2. Have planned a program of study which in the Committee's opinion will contribute significantly to their development as teachers and scholars.
3. Clearly plan to devote themselves to careers in academic medicine and the medical sciences.

Individuals who have already attained faculty rank at Harvard or elsewhere are not ordinarily eligible. There is no specific due date for the receipt of applications or for the beginning date of awards. The Committee requests that applications be submitted not more than one year in advance of the requested beginning date. The Committee will meet once a year in January to review all applications on file by December 31. Applicants will be notified by January 31.

Information and application forms may be obtained from:

Committee on Alumni Fellowships
Harvard Medical School
Room 414, Building A
25 Shattuck Street, Boston, MA 02115

AIDS

The Search for New Solutions

ANTHONY FAUCI AT THE HARVARD AIDS INSTITUTE

As 1989 draws to a close, it has become clear that these last 10 years will be remembered as the AIDS decade. More than 100,000 Americans will have been diagnosed with the acquired immune deficiency syndrome since 1980, and more than 50,000 of them will have died. Meanwhile, it's estimated that 1,000 more people in this country are infected each day with the human immunodeficiency virus (HIV), the cause of this incurable, fatal disease.

What defenses do we have against this killer? The first bulwark, preventive education, has been effective in some areas and populations, but can only help people who read and heed warnings. In the high-risk intravenous drug abuser population—the fastest-growing group of AIDS patients in the United States—educational efforts are often frustrated.

Research is underway to develop a vaccine, but as Max Essex, professor and chief of cancer biology at the Harvard School of Public Health notes, there will be no vaccine for at least five or ten years. And when, and if, the vaccine is developed, the immediate disappearance of AIDS is by no means assured; developing countries can no more afford to distribute an AIDS vaccine than the now-available vaccine for

by John F. Lauerman

measles, a disease that continues to kill in many nations.

The third line of defense is treatment, which is only possible through research leading to a clear comprehension of HIV's disastrous effects on the immune system.

"A couple of decades worth of understanding molecular biology, microbiology and immune regulation were essential to our being able to attack the AIDS problem from the very beginning," said Anthony Fauci, director of the National Institutes of Health Office of AIDS Research and Institute of Allergy and Infectious Diseases.

Fauci spoke at the first Harvard AIDS Institute Forum at the School of Public Health. Formed last year by faculty from all over the university, especially HMS, HSPH, and the Kennedy School of Government, the institute is a way to facilitate existing AIDS research and encourage new research at Harvard. Fauci congratulated Harvard and institute director Essex for their "step in the right direction—bringing together a variety of interests and forces to look at the total picture of the AIDS epidemic."

In his introductory remarks, Essex described Fauci as "one of the reasons for hope" in the face of the daunting problems posed by the AIDS epidemic. One of the leading clinical immunologists in the United States today, Fauci is a highly qualified expert on the new understanding of AIDS immunopathogenesis. After earning his MD from Cornell Medical School in 1966, he joined the NIH in 1968, and became chief of the department of immunoregulation in 1980, the dawn of the AIDS era.

Clinical immunologists involved in AIDS research have focused on exposing vulnerable points in the viral life cycle that can be exploited for therapy. But following HIV's path through the immune system has not been easy. At first, observers thought that patients' complete lack of immunocompetence meant that all types of immune cells—T cells, B cells, monocyte-macrophages, and others—were hit by the virus. However, it was later found that the virus preferentially infected one type of T cell, T4 lymphocytes.

Then in 1985, Fauci showed that HIV-infected individuals had a functional defect in T4 lymphocytes. This proved to be a key finding, since the T4 cell plays a commanding role in generating immunity.

"If you wanted to remove one cell

from the immune repertoire that would result in the most damage to the immune system, you would pick the T4 lymphocyte," Fauci said. By killing the "captain" cell, HIV sinks the immune fleet with one shot.

Later, researchers found that a specific molecule on the T4 cell, called CD4, acts as the virus' passport through the cell membrane. Normally, CD4 helps the immune system react forcefully to specific pathogens. But by binding CD4, HIV can enter the T4 cell, where it incorporates itself into the cellular genetic material and can remain silently for years before striking.

Studies of HIV immunopathogenesis have resulted in new drugs for AIDS patients. One is a synthetic CD4 "decoy" molecule that can lure HIV away from human T4 cells in vivo. The drug, called recombinant soluble CD4, appears to have few side effects and is currently undergoing clinical trials to determine its efficacy.

Researchers hope that new details about HIV's immunopathogenesis will suggest more ways of treating infection. In his talk, Fauci focused on theoretical descriptions of how the virus kills T4 cells, a subject of research and debate in many laboratories. NIAID

*By killing the
"captain cell," HIV
sinks the immune
fleet with one shot.*

researchers have shown how HIV replicates undetected inside living monocytemacrophages, almost in the same way that malaria parasites hide inside red blood cells. Fauci has also found that tumor necrosis factor may induce HIV to awaken from its latent state. These discoveries give new hope for treating the virus in its early stages, and reinforce the need for early identification of HIV-infected people.

One of the most puzzling problems of AIDS research is explaining why T4 cells disappear. Robert Gallo, the NIH researcher who, along with Luc Montaigner of the Pasteur Institute in France, is credited with the isolation of HIV, originally postulated that cell death occurs when the virus "awakens" in the T4 cell's DNA; mutiny breaks out in the nucleus as the cellular protein-producing machinery is forced to make HIV proteins. Virus begins budding off the membrane, and the T4 cell, so crucial to the immune response, dies.

But there is a flaw in this reasoning, Fauci points out: T4 cells vanish even in HIV-infected patients who are not actively expressing virus. "If cells expressing virus are low in frequency, you might expect that the normal turnover of T4 cells would be enough to keep up with the cytopathic effect of the virus," he said. "Clearly the turnover is not keeping up with whatever combination of cellular depletion effects that the virus is causing."

A number of other mechanisms have been proposed to explain the disappearance of T4 cells. Perhaps a parent to the cell becomes infected. Or the virus may cut off supplies of interleukin-2, an intercellular messenger that



Harvard AIDS Institute Director Max Essex and Anthony Fauci, director of the NIH Office of AIDS Research.

causes T4 cells to multiply. Substances toxic to T4 cells may be secreted, or autoimmune phenomena may be at work, but there is no definite answer to this question as yet.

According to Fauci, Ellis Reinherz '75, HMS associate professor of medicine, has proposed a theory of how HIV might trick uninfected T4 cells into killing one another. T4 cells normally display identifying molecules from viruses to other T4 cells, as if they were passing around a "WANTED" poster. Thus informed, the other T4 cells use this information to attack the virus and cells infected by the virus. But a strange thing happens when T4 cells display the identifying molecule on HIV, called gp120; other T4 cells treat their brother cell as though it were HIV-infected, and destroy it.

This is one of several autoimmune mechanisms researchers have proposed to explain the disappearance of T4 cells in patients expressing low amounts of virus. Understanding the pathway by which HIV kills these important cells or renders them impaired will be an important step in the development of therapies, Fauci said.

The T4 cell is the immune system's Achilles' heel, and although HIV hits the target squarely, it doesn't stop there. Fauci and his colleagues have found evidence that T4 cells pass the virus on to monocyte-macrophages. Once in those cells, the virus begins budding in the cellular organelles and vesicles, rather than on the membrane. A monocyte-macrophage can build up so much virus that, in electron micrographs, it looks "like a sack full of virus."

"This strategy can shield the virus from normal immunological surveillance," he said. "This is important when one thinks of possible reservoirs of HIV infection."

The discovery of the monocyte-macrophage reservoir helps explain fluctuations in our estimates of the level of infection with HIV. When numbers of virus are sequestered inside cells, they cannot be measured by conventional testing methods. Later, the monocyte-macrophages can serve as an abundant source of virus to infect more T4 cells and carry virus to the brain.

There may be cause for more excitement about monocyte-macrophages. Researchers have noted that when certain viruses, such as cytomegalovirus and Epstein-Barr virus, infect cells that contain HIV genes, the expression of those genes is enhanced. Monocyte-macrophages, when stimulated by these

*A monocyte-
macrophage can
build up so much
virus that it looks
"like a sack full
of virus."*

same viruses, also secrete intercellular messengers that induce HIV to come out of latency.

Fauci decided to look for the intercellular messenger that was the most potent in stimulating HIV expression. A clue was that AIDS patients normally have signs and symptoms—such as cachexia, fever, endotoxemia—that might result from the presence of tumor necrosis factor (TNF). This factor is normally produced by monocyte-macrophages in response to certain infections.

"We found that HIV-infected patients have high plasma levels of TNF, which are perfectly capable of inducing HIV expression *in vitro*," Fauci said. "So TNF is important in the normal immunoregulatory network, as well as being present in high levels in the individual infected with opportunistic infections."

In months of experimentation, Fauci and his colleagues showed how TNF could not only activate latent HIV, but could help the virus' ranks quickly escalate in a deadly circle: first, monocyte-macrophages secrete TNF; TNF then stimulates HIV expression; then, HIV restimulates monocyte-macrophages to secrete more TNF.

"It's a highly reproducible model that could be self-sustaining when you have an initial molecule like TNF to induce expression of HIV," he said.

Understanding how the HIV attack gets started will be critical to designing therapy in the second decade of AIDS, Fauci said in an interview with the *Bulletin*. As more information about the virus comes to light, it will no longer be necessary to screen thousands of drugs to see whether they have an effect on the virus. Antiviral ther-

apy will be "targeted"; drugs will be designed to block specific viral functions, such as the activation of the virus from its latent state.

"The combination of targeted antiviral therapy, together with treating people earlier in the course of their disease, rather than waiting until it advances to a clinical stage, will have a positive effect on the whole field of therapy," Fauci said. "I think that in the next year or so we will probably have a combination of drugs that can effectively suppress the virus and increase the lifespan of patients significantly—or, even better, prevent the onset of symptoms in asymptomatic individuals."

Curative therapy will not be achieved by this generation of drugs, Fauci cautioned. The nature of the virus, which becomes an actual part of the human genome, doesn't lend itself to complete elimination by a therapeutic agent.

"Look at it in terms of diabetes," he said. "You can't cure this disease, but you can allow diabetics to function relatively normally for a long period of time."

Early intervention is the trend for treatment and clinical trials, and NIH is sponsoring one trial looking at the effects of AZT in asymptomatic HIV-infected individuals.

"We don't have any answers from the trial yet. We don't know whether it's going to work. But if it does, it's going to have enormous implications for the estimated 1-1.5 million people who are now infected in the U.S."

Our growing ability to treat AIDS increases responsibility for the practicing physician, Fauci said. Patients who have engaged in risk behaviors should be encouraged to get tested for HIV infection.

"This whole idea about 'it doesn't matter if you know whether someone's infected, because there's nothing you can do for them'—those days are over," he said. "There are a number of prophylactic treatments against opportunistic infections, like aerosolized pentamidine for *pneumocystis carinii* pneumonia. You can put patients on AZT. And lastly, but most importantly, you can counsel them on how to avoid infecting their sexual partners."

"If practicing physicians are aware of this and encourage their patients—in a confidential, dignified way—to be tested and counselled, they can do an awful lot for them." □

John F. Lauerman is the acting managing editor of the Harvard Medical Alumni Bulletin.

Making Contact

HMS/Soviet Medical Exchange

I stand in a green, tiled room, surrounded by people in white gowns and caps, most of them speaking Russian. A sink occupies the corner nearest the door, and several tables are scattered about.

Surgical anatomy class begins with a discussion of today's lesson: amputations of the lower extremity. After a short talk and some questions and answers, our instructor goes out, and returns carrying a cadaver leg.

After showing us how to drain a bursa on the knee with a large glass syringe, our instructor invites us to try. One of my classmates, Robert Friedlander, appears and flawlessly drains the bursa.

Next comes the amputation of the foot. Our instructor demonstrates the first cut, and turns to me.

"Who would like to try?" he says.

How can I refuse? Noting the lack of surgical gloves, I gingerly take up the poorly preserved foot in my left hand, the scalpel in my right, and carefully make a light cut into the foot. The skin is tough, and I can't force the knife through it. Impatient, our instructor takes the scalpel from me and makes a quick, deep cut as if slicing into a melon. I don't ask for a second chance.

by Stephen Epstein

An anxious medical student's nightmare? No, it was the realization of dreams and months of careful planning. This surgical anatomy class was part of the Soviet-American Medical Student Exchange (SAMSE), in which 25 HMS students and 23 students from the Second Moscow Pirogov Medical School hosted one another in their native cities.

SAMSE brought together students, physicians, educators, and policy-makers to talk and learn about medicine in the United States and the Soviet Union. The first half of the exchange took place in Boston, and to invite dialogue with the Soviet students, we organized forums and workshops on nuclear proliferation, medical education, and health care delivery.

The Soviets met with a number of luminaries: Arnold Relman, editor-in-chief of *The New England Journal of Medicine*; Bernard Lown, co-founder of International Physicians for the Prevention of Nuclear War, for which he and Yevgeni Chazov, the Soviet Minister of Health, accepted the 1985 Nobel Peace Prize; and Julius Richmond, John

D. MacArthur Professor of Health Policy and former U.S. Surgeon General.

Yet American medicine is not limited to doctors of prestige, nor to glittering operating rooms. So, we took our guests to the Pine Street homeless shelter and Boston City Hospital, and introduced them to human rights activists and individual physicians in their offices and homes.

Communicating with our fellow students had all the on-again, off-again qualities of a summit meeting. The Soviets spoke better English than the Russian we could muster, and sometimes language threw up barriers that could only be bridged with pantomime. The greatest challenge, we discovered, was advising our guests on their menu selections: how do you describe the taste of eggplant, zucchini, or especially white chocolate, to someone who has never tasted it before?

Likewise, we heard plenty about Russia from our new friends, and were soon hungry for our first taste of that great country. When the 10 short days of their visit were up, we bid the Soviet students goodbye, looking forward to our next meeting on the other side of the world.

The Russian winter greeted us in



Above left: Soviet and American students at Red Square. Above right: the author (r) with his host.

Moscow; we arrived in the middle of an April snowstorm, and many passengers aboard our flight were belatedly playing Santa Claus. A mountain of electronic equipment was unloaded from our plane. The luggage carousel groaned under the weight of VCRs, televisions, and other electronic treasures—even a refrigerator! These items are available only to Soviet citizens with deep pockets and great patience.

Given the relative lack of consumer electronics, we were surprised by our visit to the technologically advanced Institute of Eye Microsurgery in the outskirts of Moscow. The institute is famed for its “assembly line” style of surgery, and particularly for its success with radial keratotomy to correct myopia. It was recently featured on CBS News’ *60 Minutes*, and is open to foreigners seeking treatment.

The facilities are impressive. Surgeons wear no gloves, we were told; ultraviolet light and ultrasound constantly sterilize the marble-floored operating rooms. Finnish computers display the surgeon’s view of the patient’s eye in brilliant color. Dr. Svyatoslav Fyodorov, the institute’s director, has proudly adorned one of his office walls

with these computer monitors, from which he can view any surgical procedure performed in the center.

We were led to an amphitheater where operating beds sat on a turntable, projecting out towards the surgeons like the petals of a flower. The rotation of the turntable carried each patient through several stations; at each station, one segment of the surgery was performed.

As the surgeons finished their contributions to the procedure, they would each flick on a light at the center of the turntable. When all the lights were on, the surgery beds would shift, while the surgeons remained at their stations. Most patients walked in, received a local anesthetic before surgery, and walked out of the operating room in about twenty minutes.

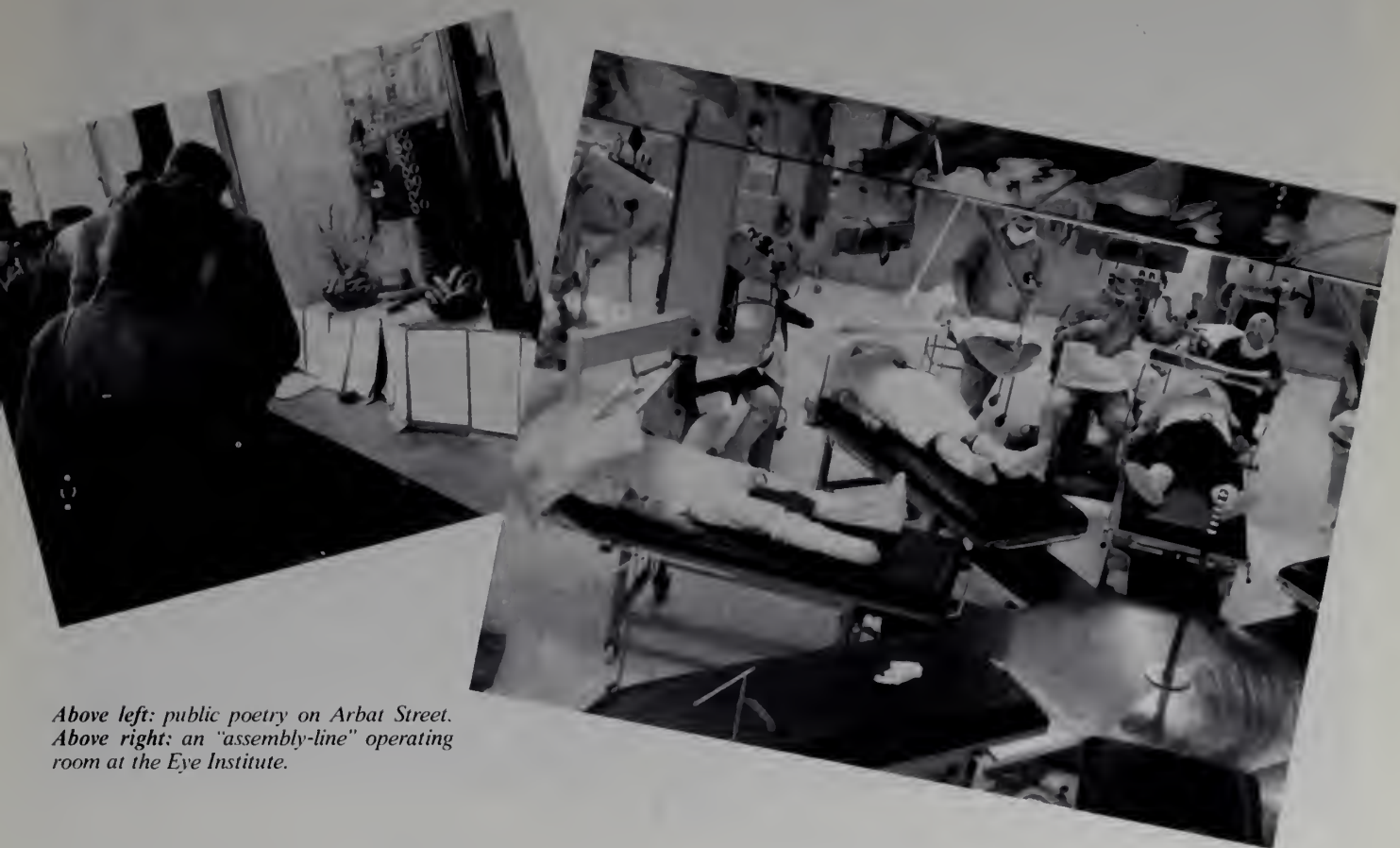
While Western surgeons have had difficulty with radial keratotomy, the institute claims an almost perfect success rate; only two major complications have been recorded in thousands of operations over the past 15 years. The surgeons we talked to seemed to like the “assembly line” method. They can rapidly refine their technique on each part of the operation and learn

the steps involved in lens implants, glaucoma surgery, and other procedures that the institute offers.

Surgeons at the institute are also paid roughly twice as much as other surgeons in the USSR, about 1000 roubles per month. With its technological atmosphere, and a publicity videotape in English directed at foreigners, the institute is clearly a showcase for the best hospital care the Soviet Union has to offer.

But there is another side to Soviet medicine. Several Western human rights advocates have charged that political dissidents are detained in psychiatric hospitals under bogus diagnoses. In June, an article in the Soviet *Literary Gazette* accused three top-ranking Soviet doctors of aiding authorities by declaring political dissidents mentally ill.

I was therefore particularly interested in our visit to the Kashchenko Psychiatric Hospital, the largest psychiatric facility in Moscow. With 3000 beds, it’s about three times the size of the Massachusetts General Hospital. Its many brick buildings scattered about a sizable tract of land gave it the look of a college quadrangle as we approached.



Above left: public poetry on Arbat Street. Above right: an "assembly-line" operating room at the Eye Institute.

The medical facilities and the doctors operating them seemed taxed, especially in the intensive care unit. One ICU doctor scurried about a six-bed room equipped with idle EKGs. We later learned that equipment is hard to come by in Soviet hospitals, and even more difficult to have repaired. Consequently, it is used as infrequently as possible, and central monitoring is unusual.

A nurse met us at the entrance to the women's ward and led us down a long, white, dimly-lit hall to the common area. Adjoining the hall were patients' rooms, each holding from four to ten beds. The painted cement walls were devoid of decoration, and dark plaid blankets covered the neatly made beds. The most cheerful area was the common room, which was filled with sunlight. Wallpaper, although plain, lent a cozy feeling to the room.

Here women worked quietly on various arts and crafts, such as making fringe on a piece of cloth. The nurse told us that work therapy is central to the patients' treatment. Some sewed at a table, others sat on the several couches in the room. A television, unwatched, provided background noise.

One patient, who stopped her work to shake our hands as we entered, followed us throughout our visit. We later learned that she was in the hospital because she had been diagnosed with gonorrhea, and refused treatment. To refuse treatment, and subsequently knowingly spread disease, is illegal in the USSR. After a psychiatric examination, the woman was placed in this mental hospital.

Some unusual psychiatric therapies are used in the Soviet Union. One woman was being treated for a psychiatric condition with a fiber optic laser intravenous line. Although an explanation was attempted, we could not understand how the therapy worked.

Sulfazine, a drug derived from peach pits, has no medicinal use in the West. However, Soviet doctors use sulfazine for the treatment of intractable schizophrenia. The drug's major side effect is fever, often up to 104°F. We saw one patient in the common room whom we were told had been receiving sulfazine injections. She did not appear to be uncomfortable.

None of the patients we encountered during our visit spoke of political imprisonment. However, a fact-finding

mission from the U.S. State Department recently toured many of the psychiatric facilities in the USSR, and will soon issue a report on those visits. The debate will continue later this year in Athens when the World Psychiatric Association decides whether to readmit the Soviet Union to its ranks.

Later, we discussed the psychiatric hospitals with health minister Yevgeni Chazov. Our meeting took place in a wood-paneled room in the ministry building. Although it appeared that he understood our question, Chazov used an interpreter. A Politburo member, Chazov was still very much the politician, yet made some interesting comments.

As recently as the Brezhnev regime, Chazov said, doctors might have committed political prisoners to mental hospitals at the state's request. But today, he insisted, this does not occur. Chazov was adamant on this point, and his tone indicated that the subject is still a sensitive one in the Soviet Union.

The subject turned optimistically to *perestroika*, which, according to Chazov, is affecting the USSR health care system in two principal areas: improved facilities and new ideology.

By the year 2000, the Soviets hope to have one million new hospital beds in place, while closing or renovating several older hospitals. New medical equipment is being produced in joint ventures with American companies, such as Johnson & Johnson and Hewlett-Packard.

The new *perestroika* ideology places emphasis on disease prevention and quality of medicine, Chazov explained. To this end, the Soviets have set a goal of one doctor for every 1600 citizens.

After getting a glimpse of the health care system our fellow students will inherit, we wondered what Chazov considered the greatest challenges facing Soviet medicine today. He instantly replied that proper hygiene and environmental problems are important, but then turned his attention to drugs and alcohol. The health ministry has identified about 50 thousand addicts, but estimates more than double that number exist.

More surprising was the ministry's estimate of the number of alcoholics: 4 million, in comparison to 10.5 million alcoholics in the U.S. We were expecting a much higher number.

This was not the first time we had encountered such sensitivity about alcoholism in the USSR. Earlier, one of the students had insisted: "There is no problem with alcoholism in the Soviet Union." One learns quickly that there are no problems in the Soviet Union, only issues.

We were curious about AIDS in the Soviet Union. Could it be discussed with candor, if at all? Chazov was very specific, having just received the last figures on his desk that morning. "There are eight patients with AIDS," he said, "and four people have died of the disease. In addition, there are 189 seropositive Soviet citizens, and 400 foreigners in the USSR who are seropositive."

Chazov's AIDS testing program is extensive. Soviet laboratories have performed more than 30 million tests for the human immunodeficiency virus (HIV) that causes AIDS. All donated blood is tested, as well as all foreigners staying in the USSR for longer than three months. In addition, all Soviet citizens who are abroad for more than three months must be tested upon their return.

We were also surprised to learn of one route of HIV infection in the USSR. Our student counterparts told us that it is a common, yet unauthorized, practice to deliver injections to many patients through one syringe, as disposable syringes are in short supply. Pediatric vaccinations are often given through

used syringes, and this is how many children in the USSR have become HIV-infected.

In June, Vladimir Pokrovsky, president of the Russian Academy of Medical Sciences, told an international conference on AIDS in Montreal that, because of this practice, he has "every fear that health workers will discover more infected children." But in our meeting with Chazov, we were told that the Soviets are building a new disposable syringe manufacturing plant that will increase the supply produced each year from the current 13 million to approximately 1 billion.

...sometimes
language threw
up barriers that
could only be
bridged with
pantomime.

Our meeting with Chazov left us wondering about the effects of *glasnost*; can a high-ranking Soviet official address politically sensitive issues more openly than he could ten years ago? It was not until we reached the streets of Moscow, particularly in the shopping district called Arbat Street, that we truly saw *glasnost* in action.

Would you believe Hari Krishnas in Moscow? Yes, there they were, as if transported from the entrance of the Harvard Square Coop. Their dress was a little more conservative, but the mantra was the same. On the same street, my host Vicki Vasilkova and I joined a large crowd listening to an unusual jazz trio of banjo, violin, and bass.

The largest crowds, however, surrounded the performing poets. Every hundred yards or so, we came across political poets, not reading, but performing, with passion in their voices. Their subjects—the lack of food, the corruption of officials—were taboo only a few years ago.

While it is now legal to privately publish books in the USSR, it is still difficult to find the money or facilities to print this new poetry. So, poets type their work on carbon paper, and tack it to boards which they lean against buildings near where they are performing. If you like a poem, you can buy a copy signed by the author.

The poets' idealism was refreshing compared to the standard posters bearing slogans praising the Revolution. Our medical student counterparts, too, exhibit this idealism, for despite the little respect and poor pay Soviet doctors receive, these students are committed to their craft.

The average doctor makes about 300 roubles a month, roughly the same salary as a taxi driver. Engineering and basic research are far more prestigious scientific fields in the USSR, and even these do not carry the type of respect that medicine has in the U.S.

We wondered, though, if the situation might encourage more caring people to become doctors. After all, Soviet medical students are well aware of the economic and cultural station their profession offers. Their attraction to medicine seems to be rooted in the joy of helping people, rather than status or material gain.

Our week of learning about the Soviet Union was over quickly, and the night before we left, there was a small party at Vicki's apartment. Tea, jam and cookies loaded the table, and Vicki presented me with a tea set as a memento of our late-evening talks together.

I realized that, before my trip to the Soviet Union, I had not been sure that the people I was to meet would be at all friendly. Yet I found myself leaving many good friends there; we were able to have frank discussions about human rights, drug addiction, religious freedom and other problems—topics that the Soviets have traditionally considered controversial. While our governments may be adversarial at times, I found the people genuinely friendly and interested in getting to know us.

Our dream, the student exchange, was at an end, but the exchange of ideas need not end. Vicki and I have already eagerly discussed plans for visiting one another. Some day, friendships such as ours may help unite Soviet and American physicians in one multinational medical community, with a credo condemning, not one another, but our common enemies of disease and suffering. □

Stephen Epstein is a third-year student at HMS.



CLASS DAY

As is so often the case with stormy days, it was a time for putting things into perspective. While rain drummed steadily on the canvas above, the graduation ceremonies became a cocoon of solemnity, pageantry and reflection. On their first day as doctors, many students tied white strips of cloth around the arms of their black graduation gowns, in mourning for the deaths of students in Beijing.

Families and well-wishers under umbrellas of every description—plaid, flowered, black, transparent, tan, some sporting Harvard insignia—clustered around the great white tent to hear words carefully chosen for the 143 departing students. Some graduates received special recognition, with awards or honors, or had earned additional degrees of Doctor of Philosophy, Master of Public Health or Master of Public Policy.

Speakers called on the new physi-

cians to remember their first priority: the patient, whether rich or poor, coherent or insane, health-conscious or self-abusive. Gloria Bachelder had first-hand experience with inadequate medical care for those who can't pay the bills. One of a poor family of 12 in rural Maine, she saw her brother go without the treatment he needed for a punctured eardrum. "Now is the time to question ourselves about people with-

out," she said, "without insurance or access to medical care, without a voice."

The dripping, beeping, electroshocking world of high-tech medicine is familiar to today's doctors, but Christopher Wallis fears that it often puts patients under a moral microscope. Scientific understanding of illness has improved care, but is no longer useful when it encourages the physician to pass judgment. "Patients who don't conform to our agenda, who don't comply with our recommendations, they need us not to withdraw in frustration, they need us to refrain from judgment, perhaps remembering to 'let he who is without sin among us cast the first stone.'"

Perhaps few doctors understand the patient as well as MGH physician Charles McCabe, who was diagnosed with multiple sclerosis at the end of his surgical residency. He encouraged the graduates to be aware of political and economic issues in medicine, but to leave

those issues at the door to the patient's room. "The patient wants one thing, and that's a physician who cares about him," he said. "Medicine begins with the patient, it ends with the physician, and that's it."

Renowned author Oliver Sacks, the keynote speaker, felt that his attitude towards medicine was best expressed by his own "zigzag, eccentric" pathway through medical school, internship, residency and other clinical experiences. "The central thing which has become stronger and stronger as the years have passed is the sense of uniqueness and individuality of each patient," he said. "Similarly, there must be a unique relationship between the patient and your-

the ceremonial black and pink hoods over the graduates' shoulders as they proceeded to the stage.

Fifteen students graduated cum laude, five graduated magna cum laude, and nine were honored with prizes and awards:

Eric I. Aguiar, cum laude: "Real-Time Hexose Monophosphate Shunt Activity in Light- and Dark-Adapted Rabbit Retinas."

Lishan Aklog, cum laude: "The Molecular Genetics of Human Profilin."

Michael S. Aronow, cum laude: "Characterization of a Rat Osteoblast-like Culture System."

Richard E. Austin, Jr., cum laude: "The Profound Spatial Heterogeneity of Coronary Reserve."



self, and similarly, your own approach to patients and learning about them has no rules and no programs laid down in advance."

While an army of video cameras recorded each second of the scene, the Class of '89 lined up to accept their long-awaited degrees and applause. The class also showed appreciation for some of their benefactors. Registrar Noreen Koller received the "Special Award from the Class of '89." Catherine Keyes of the student affairs office was thanked for her role in organizing the commencement ceremonies. Richard Murphy, former HMS Professor of Anatomy, returned from the College of Medicine at the University of Alberta in Edmonton, Canada to receive the preclinical teaching award; Leslie Shu-Tung Fang, assistant professor of medicine, received the clinical award. Carola Eisenberg, dean for student affairs, and Curtis Prout, chairman of the internship advisory committee, were chosen to drape

Margaret L. Baer, magna cum laude: Henry Asbury Christian Award for notable scholarship in studies or research, "Molecular Analysis of a Specific mRNA-Protein Interaction."

William P. Carter, Dr. Sirgay Sanger Award for excellence and accomplishment in research, clinical investigation or scholarship in psychiatry, "Acute Cardiovascular and Mood Effects of Tranylcypromine."

Lewis A. Chodosh, magna cum laude, Leon Reznick Memorial Prize for excellence and accomplishment in research, "Yeast and a Human CCAAT-Binding Protein Have Heterologous Subunits That Are Functionally Interchangeable," and "Human CCAAT-Binding Proteins Have Heterologous Subunits."

Nicholas A. Christakis, cum laude: "Which Ethical Standard for Transcultural Biomedical Research?"

Susan E. Connolly, magna cum laude: "Characterization of Vascular Development in the Mouse Retina."

Philip J. Ferrone, cum laude: "The Fate of Circulating Human Choroidal Melanoma Cells in the Nude Mouse."

Stuart Forman, James Tolbert Shipley Prize for research, the results of which have been published or accepted for publication, "N-Alkanols and Halothane Inhibit Red Cell Anion Transport and Increase Band 3 Conformational Change Rate," "Is Agonist Self-Inhibition at the Nicotinic Acetylcholine Receptor a Non-Specific Action?" "High Acetylcholine Concentrations Cause Rapid Inactivation Before Fast Desensitization in Nicotinic Acetylcholine Receptors from Torpedo," and "Procaine Rapidly Inactivates Acetylcholine Receptors from Torpedo and Competes with Agonist for Inhibition Sites."

Bernard F. Godley, cum laude: "Inhibition by Melatonin of Dopamine Release from Human Y-79 Retinoblastoma Cells." The Henry J. Kaiser Family Foundation Merit Award for outstanding academic achievement, leadership and service in medical school and demonstrated potential for continued contributions to medicine by a minority student.

Sally Jody Heymann, cum laude: Rose Seegal Prize for the best paper on the relation of the medical profession to the community, "HIV and Infectious Disease Interactions: The Potential for Secondary Disease Spread to the General Population."

Michael F. Janicek, cum laude: "Defects in the Progression of the Lytic Cycle of a Herpes Simplex Virus Type 1 Mutant Lacking Both Immediate-Early Copies of the Gene for ICP0."

Joanne E. Levy, cum laude: "Development of a New Method of Clonal Analysis and its Application to the Investigation of the Myelodysplastic Syndrome."

Thomas I. Margolis, magna cum laude: "New Mid-Infrared Lasers for Vitreous Membrane Cutting and Sclerostomy."

Keith T. Paige, cum laude: Harold Lampert Biomedical Research Prize for the best paper reporting original research in the biomedical sciences, "Retinol as a Differentiating Agent in Endothelial Cells."

Richard F. Selden, cum laude: "Studies on the Genetic Diagnosis and Treatment of Human Disease."

Marc T. Silver, cum laude: "Authority and Knowledge in Medical Education: Effects of Tutor Expertise on Tutorial Functioning."

Timothy D. Shafman, cum laude: "The Effects of Diazofurin on the Induction of Mouse Erythroleukemia Cell Differentiation."

Karol E. Watson, magna cum laude: "The Timing of Onset During Carcinogenesis." The Henry J. Kaiser Family Foundation Merit Award for outstanding academic achievement, leadership and service in medical school and demonstrated potential for continued contributions to medicine by a minority student.

Linda D. White, Richard C. Cabot Prize for best paper on medical education or medical history, "Historical Contributions of Medical Radiology to Current Radiation Dose Limits."

Alexander S. Young, cum laude: "Negative Symptom Expression in the Course of Schizophrenia." □



CLASS DAY

The Eccentric Pathway



by Oliver Sacks

I first want to express my great pleasure and my gratitude at being invited here by you because I'm not only an outsider but, I feel, somewhat of an eccentric. I barely made my way through medical school, and I still have recurrent nightmares that I never graduated.

One of my heroes is Hermann von Helmholtz. In later life, Helmholtz published two essays. One of them was an essay on the practice and principles of medicine, and the other was an autobiography. These two things have many internal resonances. He couldn't talk about the practice and principles of medicine without being autobiographical, and he couldn't be autobiographical without talking about medicine, which was his great love.

In his autobiography, Helmholtz says that even as a child he couldn't remember things which were unconnected, and he was bad at school. He could only remember things when they were organically connected, either in a theoretical or scientific connection or in a narrative, or poetic, or dramatic connection. He also said that he had never been able to approach or solve any problem directly. He always found himself making sidetracks, going backwards, running into cul-de-sacs and having to turn

around. Finally, he would get where he wanted, and only then did he see there was a "royal road" to the solution of the problem. He said that in the papers he wrote, he always presented the royal road, but that was not the road he had ever taken or been able to take. Psychologically the road was always crooked and strange: his own pathway.

I also want to take the liberty of talking somewhat about my own zigzag and eccentric path. I don't know whether it is merely eccentric and idiosyncratic, or whether it illustrates some general principles of the way one may have to do things. My first passion was for the natural sciences, for physics and chemistry, and was not, I have to confess, for the care of people. What Barbara McClintock has called, "a feeling for the organism," and beyond this a feeling for people, is something which came later with me.

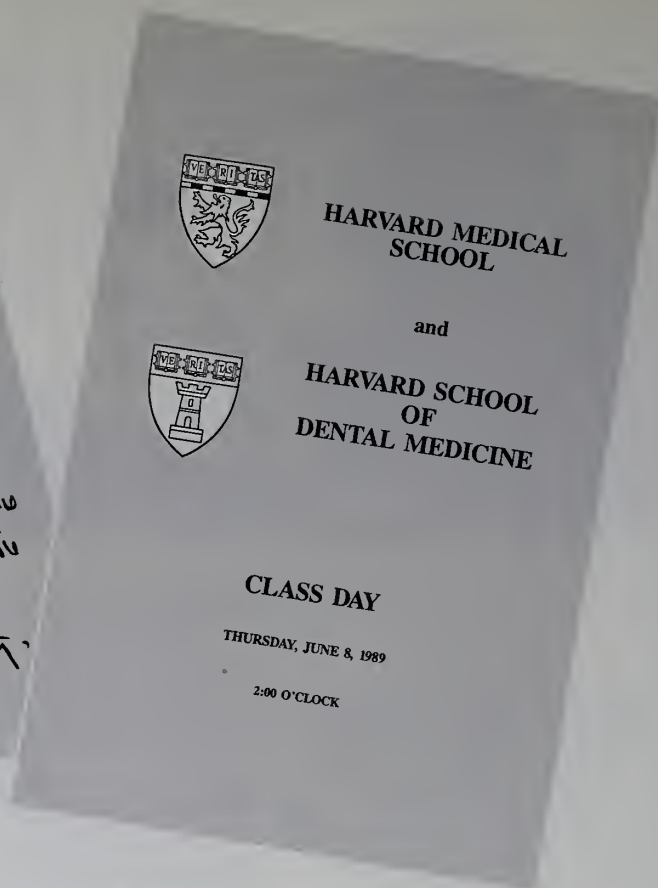
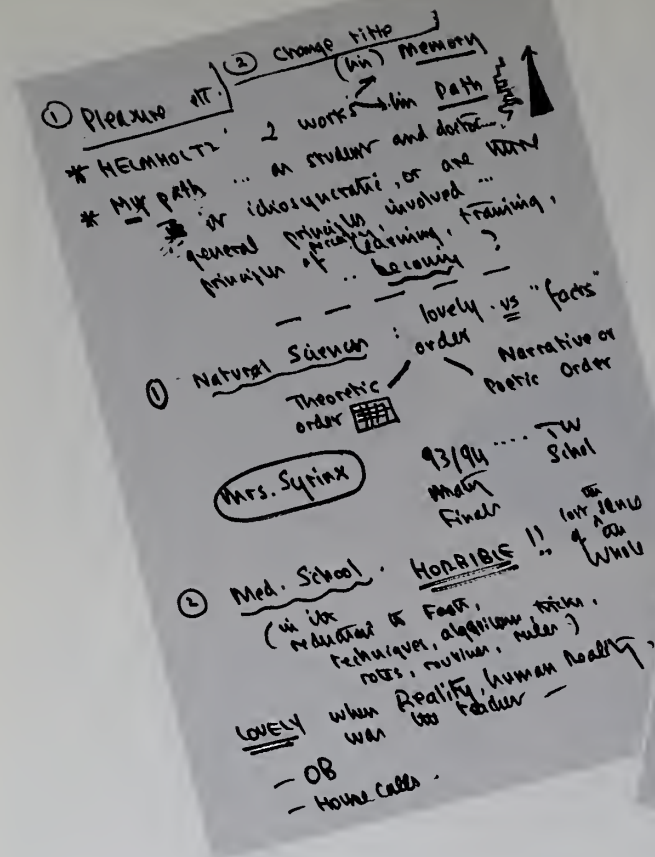
When I was at Oxford I did schools in physiology, psychology and philosophy. The subjects seemed to be unconnected, but one had a feeling they should be connected. Their yoking together was more of a hope in 1951 than anything else, although now, 40 years later, I think it's beginning to become a reality. We also had anatomy and biochemistry at that time, and

something of what you call the New Pathway. It was, for example, difficult to learn the tracts of the spinal cord, and to assist us, a patient was brought in with syringomyelia. We came to call her Mrs. Syrinx, and Mrs. Syrinx would tell us her story, and how her symptoms had developed. She would say, "Don't try and think of the tracts of the spinal cord, don't think of syringomyelia as something on page 900. Think of *me*. Think of the story I've told you. Think of the way my arm hangs down, of the way my head is turned to the side." She said, "Think of me and it will all come to you." So, very early on, it was felt that anatomy should be matrixed in clinical condition and in human life. For myself, I never forgot Mrs. Syrinx, but I did forget all the unconnected facts.

When it came time to do finals at Oxford, out of a class of 94, I'm afraid I came in 93rd in anatomy, which is why I said I almost didn't make it. My mother, who was a surgeon and a professor of anatomy, was very distressed at this. After that exam I went and got drunk, and in my drunkenness I conceived a mad notion that that afternoon I would go in for the triennial university scholarship in anatomy. There were a number of essay questions and I answered one question, and luckily I got it. This wasn't just a fluke, because this sort of disparity between doing very badly on tests and doing well on essays was something I experienced all through my academic training. It probably says something about the nature of mind—at least my sort of mind.

When I went on to medical school I found it horrible in many ways—indeed in most ways—but wonderful in some ways. I found it horrible in its emphasis





Oliver Sacks' speech notes were written on the back of his Class Day program.

on formal instruction and lectures, and in some sense, reducing medicine to methods, techniques, algorithms, tricks, rules, routines, rites and so forth. I seemed to lose the sense of the whole when this was going on.

On the other hand, there were some things which were very good and which I remember with great affection and gratitude and which I think had an enduring effect on me. One was that we had leisure. When we weren't being tormented by lectures and practicals and tests we were allowed to go and see patients in our own unstructured way. For example, I remember one patient, the first patient of my own then, who was an old tea planter from Ceylon in a terminal uremic delirium. He was thought to be a rather uninteresting patient. But I was fascinated by his delirium and I listened to it for hours on end, and it was an amazing privilege. It was like being privy to a dream, being privy to someone's inner landscapes.

As I listened to him—even delirium always connects with experience and motives and personality—gradually his inner landscape became clear to me. Then I started to make comments—to enter his dream. I think there had been a sort of terrifying alienation and loneliness in the delirium, and there was a

lovely sort of warmth as well as illumination that became possible when one could enter his delirium. This was regarded as eccentric behavior: "Sacks listening to a delirious patient." But, it was a beautiful and invaluable experience.

Another thing I recollect with great pleasure, even though I'm not terribly fond of obstetrics, was my two months in obstetrics. I didn't do this in the hospital. I went to Dublin to do it, and all the deliveries were on kitchen tables. I would cycle out with a midwife and we would deliver the baby. There was a strong feeling that this was real life. One was introduced to every sort of human drama, and every sort of human passion, and every terror and every strength, and at the same time, there had to be a minute knowledge of every obstetric eventuality there was. I remember those two months of obstetrics far more clearly than anything else in my entire time at medical school.

Another thing I remember with great pleasure was a neurologist with whom I did an elective, but who was not just a hospital consultant, but went out and did house calls, and who was as concerned with the care of the patient and feeling for the patient as with finding the lesion. Something which is often very dry and repellent in the hospital

became humanized and given a human and moral dimension which was crucially important. It was this that made me go into neurology.

My father is still a practicing physician at 94. He retired briefly when he was 70, but after 48 hours came back into harness, and the same at 80. When he was 90, we said, "You must cut back. As a start, cut back on house calls." He said, "No, I would sooner cut back on everything else." And so he gets a minicab and he goes out on house calls, because for him, that is where the real reality lies.

I'm going to skip over residency. That was for me a rather nice, psychopathic period in Southern California, and I spent most of it on the beach, and I was lucky enough to survive many hundreds of thousands of miles on a motorbike. I can't tell you much about residency. I didn't really enjoy medicine, I didn't really get a feeling for being a doctor until I was a doctor, and got out of school.

I had a brief period during which I tried to be a scientist. I had a fellowship in neuropathology and neurochemistry, but I was very clumsy, and there was finally a crisis when I broke the ultracentrifuge. I screwed the oil objective lens through a slide and I lost a specimen of myelin which I had spent

nine months preparing. And at that point they said, "Get out! You'd better be with patients, you'll do less harm there." And so I was kicked into clinical medicine, and loved it from the start.

I first worked partly in a migraine clinic. This was and is a very good way of teaching one to become a physician. I said I came to human beings and human concerns relatively late. I partly admit this in the preface to my first book when I speak of being fascinated by the phenomena of migraine. In a few minutes one could see everything from vegetative symptoms to all sorts of disturbances of higher cortical and mental functions. I said every patient of classical migraine opens out into an encyclopedia of neurology. But then I said I was recalled from this neurological preoccupation by the suffering of the patients, and their needs and their calls for help. The other side of medicine, caring for the patient, only fully developed in me when I had to care for the patient, first of all with these migraine patients.

The other place I moved into was a chronic hospital. Chronic hospitals tend to be either neglected or dismissed by physicians. They're seen as dumps, as something in the sticks. My own experience with chronic hospitals was totally different, and *is* totally different. I have spent the last 23- or 24-year period in chronic hospitals. Here, Dr. McCabe spoke to you just now of the privilege of being a doctor, and of patients presenting their problems and their lives to you, and of how much one is given. The sense of privilege can reach a maximum in a chronic hospital, where the entire existence of the patient may be known to you, and to some extent shared by you. These patients—without ever ceasing to be patients, with sometimes almost unimaginable problems, predicaments, and equally remarkable adaptations and resources of various sorts—these patients also tend to become collaborators and friends. Here again, I think the greatest education in humane medicine can be given by life in a chronic hospital.

Recently I've developed a feeling, not just for the individual, but for communities. I've been especially interested in the deaf, and their language and their culture. The most wonderful adaptation to a disability known to me is to develop a language. When you look at the deaf, you cannot look at them in a purely medical or pathological way, but you have to see them as a people with a unique adaptation of their own.

The central thing which has become

stronger and stronger as the years have passed is the sense of the uniqueness and the individuality of each patient. Not simply their moral and human individuality, but the individuality of their nervous systems, the individuality at every level from the neuronal to the spiritual. Every place is unique as well as every person. Similarly, there must be a unique relationship between the patient and yourself, and similarly your own approach to the patient and learning about them has no rules and no programs laid down in advance. You must feel your way to the uniqueness and the reality of each patient. And so, with this, there has been a movement more and more against mechanical thinking for me.

I don't know whether the name of Gerald Edelman means anything or much to you. I think it's something which may come to mean a great deal because I think that Edelman may have developed the first non-reductive theory of mind and of human nature and of perception and of learning. There's always been a sort of dualism in physiology and psychology and philosophy—a ghost in the machine. We have this machine—which Leibnitz compared to a mill and which the last century compared to a telephone exchange and which we now compare to a computer—and there is a spirit somewhere at large in it. This is obviously nonsense. And yet, there has been, until very recently, no even plausible theory for bridging the gap: showing how an individual can perceive and learn and become himself in a unique way. Even pigeons, which

are often regarded as brainless and automatic, non-corticate and striatal, have individual perceptual categorizations and learn in a completely individual way. If pigeons do so, surely you do so.

Which brings me finally to the New Pathway. It's clear that pigeons are not very good at learning facts. They learn *situations*. They're not very good at learning methods, they learn *judgments*. And again, if this is so for them, how much more so is it the case for you. Whether or not one needs to memorize and to be crammed with facts and to be programmed with techniques as medical students. I'm not sure. You yourselves are already rebelling against this in your New Pathway. But it's for certain that when you get out of the nest, as you are doing today, you will be thrown onto your own resources, which must be both a fear and a delight to you.

To some extent you may have had to follow fixed paths, and accepted ways of perceiving and thinking and doing things as students. Now the only pathway in front of you is your own, and you have to discover your own path, your own ways of doing things and your own selves. I am excited with you and for you on this day of junction between the old way and your own way and I can only wish you the best of luck and the fullest realization of your own potentials. □

New York neurologist Oliver Sacks is the author of Migraine, A Leg to Stand On and The Man Who Mistook His Wife for a Hat.



Principles and Priorities of Medicine



by Charles J. McCabe

This is really a great day. The weather's not so great, but that doesn't detract from the significance of this day. There's only going to be a few of these days in your lives and in your careers. They'll include things like your graduation from college, your marriage, the birth of a child, and a day like today.

I wanted you to remember today fondly and happily, and to appreciate all the things that are going on around you. I am truly honored that you asked me to be a participant. After all the trouble I created for this class at the MGH, I haven't got a clue why you asked me to speak here today. But I'm thankful that you did.

When I received the letter from Mr. Zambuto asking me to be the presenter today, I must tell you I was thrilled and excited. I told Dr. Austen, the chief of

my department, and he said, "Well, there's some good news and some bad news. The good news is that they've asked you to be the presenter. The bad news is that you've now got six months to try to figure out what you're going to say."

As usual, Dr. Austen was absolutely correct. It has been six months of going through a tremendous amount of information and other presentations that have been made at these proceedings. I have reviewed every *Alumni Bulletin* for the last ten years, and there have been some incredible speakers up here. I am nowhere near their quality, nor do I have their qualifications. But I'm up here, and I'm going to continue to talk because I've got the podium.

I recently had a chance to talk to some HMS grads at the MGH and I asked them about what you would like to hear. They said you didn't want to hear about how difficult it is to be a physician in 1989. So I'm not going to talk to you about DRGs, or about PPOs. I have a friend in the audience who's a lawyer—but he's still a friend of mine—so I'm not going to talk about malpractice.

These students said that I ought to personalize the talk. I've heard that's supposed to be a bad thing to do when speaking, because it can make you sentimental. But you're going to get a little bit of personalization, and you will hear some McCabe-isms.

I'm going to tell you why I'm a doctor, why I like to be a doctor, and why when I wake up in the morning I have a smile on my face—and we're talking about 4-4:30 in the morning. I go to work and I work all day, I don't get out of the hospital until 6-6:30, on an early day. I'm tired when I get home, but I'm satisfied that I've done something good during the day. When I go to sleep I'm as happy as a clam. It's about 9:30 at night, and I've played

with my daughter and talked with my wife, and I go to sleep. But I'm satisfied and happy and I've got a smile on my face.

So one of the McCabe-isms is: Wake up in the morning with a smile on your face, have a good time with what you're doing, and go to sleep with a smile on your face. Those are McCabe's rules for staying alive and being happy.

Now, how do you do that? You could win the \$22 million Megabucks. But instead I've developed the *Principles and Priorities of How I Practice Medicine*. I also came up with my mnemonic, the Double-Triple H's, which apply to these *Principles and Priorities*.

As many of you know, I developed multiple sclerosis when I was in my last year of . . . whatever it was that I was doing. I was going to be a surgeon and it was really a bummer. What I decided was "We're going to do something positive with this thing." I wasn't going to let it destroy what I was going to do with my life. I developed a positive attitude about this thing and decided I was going to go for it.

So I did a lot of limping around, and did a lot of riding on a bike. And I have had every treatment for the disease, and some very good doctors. But I have never been able to—and I have never had to—give up what I do. I'm happy being a doctor; that's what I want you to know. Don't wait for something to be taken away from you before you realize how much you really love it.

My talk is directed to all of you, the whole graduating class, but it's particularly directed to those of you that were part of me at the MGH. You made my job fun, and you made us able to create an environment friendly to learning. That's a great phrase, "friendly to learning." That means that you have fun, I have fun, we laugh a little bit, but we learn a lot. That's so very important as you proceed with your education and with your career. I want you to continue to that end. I teach, and that's the definition of the physician.

As you go on to your internship, there are going to be some bumps, and it's going to be hard. It's going to be very important for you to develop a good sense of self-esteem. You've got to like yourself. Now, as some of you know, I went to Notre Dame. Notre Dame was the national college football champion last year. Lou Holtz, the team's coach, was in town and gave a speech after a dinner, and talked about three rules he uses to develop self-esteem and self-worth in his players. Those are: you do good, you do your best, and you live by the Golden Rule.





and that is, "Do unto others as you would have them do unto you."

That's incredibly important in the hospital environment. You've got to treat people nicely, you've got to treat people like you expect them to treat you, and you'll have no problem. No trouble. As I've said so many times before, if you treat people nicely, they'll be nice to you, they'll do things for you, and they will be very pleasant to deal with. I will guarantee you that if the reverse occurs, you're not going to be having the best time during your careers, whatever you do.

We have some troubles in medicine. There are a lot of important political issues that will affect your careers. I think that you need to be aware of those issues—and yet stay somewhat clear of them, and ignore them to an extent. You have to pay attention to what you're doing, and that's medicine, your career, taking care of patients.

You need to have a mature attitude when you're coming to the hospital. You'll be interacting with administrators who are having a hell of a time keeping the hospital afloat. As you come into contact with them, recognize that they're under just as much stress as you are to keep patients cared for.

I recently read an article in the *Harvard Business Review* concerning hospitals. I still don't have the slightest idea what the subject of the article was. There were references to "product diversification," "mature product portfolios," "declining margins" and "bureaucratic overburden."

"What the heck are they talking about?" I thought. "This is a hospital. We take care of patients." The authors

then referred to patients as "clients."

Well, the smoke was coming out of my ears. I said, wait a minute, this is wrong, this is not what I'm in the business for. But as I went through the article, I came to this conclusion: it's true, we don't take care of clients, we take care of patients; but hospitals, on the other hand, are businesses.

Hospitals operate in a business world, and all those terms apply. Many of the hospitals in this state and the country are having a tremendous amount of financial trouble. We need to understand those troubles. We need to understand the administration of hospitals, and more importantly, we need to learn to work with administrators. They're not after us. They're just trying to keep the hospital afloat. The more we learn to work hand-in-hand with our administrators, the better off we're going to be. It's your responsibility not only to take care of patients, but to help the hospital stay afloat and to learn to work with our administrators.

There is one thread of medicine which is the same now, was the same in the past and it's going to be the same in the future, and that's the patient. The patient wants one thing, and that is a physician who cares about him, who wants to take care of him and wants to find out what the problem is and wants to fix it. That will never change. Medicine begins with the patient, it ends with the physician, and that's it.

You as physicians must realize one thing. You went into this profession as an altruist. That means that you love to do what you do, and that is your pur-

pose for being here. You are in a profession that gives and doesn't take.

Your education as a physician has gone through tremendous changes. There's a New Pathway, and new buildings and a new curriculum—the whole nine yards. But the most important thing about your education and what you do is that you never forget that the patient is the primary focus of attention. They want you to want to take care of them.

What I want to do is to emphasize the qualities of the physician that will allow you to do that. This is one of McCabe's mnemonics, the first Triple-H. Those three H's stand for honesty, hard work, and humility. I make a big deal out of humility; people are willing to forget the mistakes of a humble man. There's no reason for you to be very proud and beat your chest. You did a lot of work and that's great, but it is a privilege and you should consider yourself lucky.

I have to tell a story about my father-in-law, who's Italian. He was really happy when I married his daughter. Why, I can't tell you. But since he now has a doctor in his family, he can be referred to as a Don. So now I'm well connected, I've got a Don in my family.

But there's something about this that I don't think is right. He doesn't deserve any special recognition because he's got a physician in the family. And I would say the same thing for you. You don't deserve to be proud or beat your chest just because you're a physician. You're lucky to be where you are. It's a privilege to be a physician and invade people's lives in the way you're able to.



Keith Lindgren '63 and daughter Ann Lindgren '89.



to love what you do as soon as you get done listening to me.

Why do I want this class to be remembered? I feel attached to this class. I got to know so many of you, and to know you very well. I want this class to be remembered because you're nice people, you're intelligent, and you've made the commitment to caring for patients who are sick.

I have one other thing to say. You have an opportunity to make a difference in this world by your profession. There are a lot of professionals out there who are never going to make any

difference to anyone. You can make the difference to a patient. You can save their lives, you can fix their diseases, and you can boost them psychologically. I really hope that you take the opportunity to make that difference.

I want to make a wish to you, and that is that you achieve all that your talents will allow. □

Charles J. McCabe is HMS assistant professor of surgery, and associate visiting surgeon and director of the HMS core surgical rotation at the Massachusetts General Hospital.

CLASS DAY

An Upstream Journey

by Gloria P. Bachelder '89

It's incredible: when you're a doctor, you walk into someone's room and find everything out about them that they wouldn't tell anybody. That's a true privilege, and you as physicians are a privileged group.

There's another important element to all of this. You have priorities in your life, and that's the second set of Triple-H's. (It was a lot of work to get this one.) The first of these H's is your home. I'm not embarrassed to say that your professional career is not the number one priority in your life. You've got to take care of home. You've got a family, you may have some children. It's easy to go home with a smile on your face if you've got a happy home and you like what you're coming home to. Also realize that your family played a major role in your being here today!

The second, and I can talk about this, is your health. Don't assume that you're going to remain healthy, although I'd love for you to do that. Respect your bodies, respect your cerebral abilities and your physical abilities. If you want to go jogging or biking on Longwood Avenue, I'll talk to you about that. If you get on a motorcycle I'm going to hook you with my cane.

Last of the three H's are your hospital careers. You are now entering into the most phenomenal of careers. It is a wonderful occupation. Know that its rewards are not financial. You know how you get rewarded? You have a patient say: "That's my doctor and he took good care of me."

Know also that it's fun. What I want for you is to realize that taking care of patients is purely fun. I love what I do, and I hope that everyone of you is going



We want to believe that medical care is blind to the prejudices of our society. In medicine, like in the rest of society, we treat things that we don't understand with suspicion and even hostility. One of the things is poverty—poor

people. Yet, it's essential for us as doctors to understand people who are poor and to realize that they are not so different than we are. They have just taken a different journey on the same stream.

There are millions of poor, but millions don't mean much. It's personal experiences that shape what we know, shape what we believe. I remember some of my first experiences with the attitude towards poverty.

I was in high school, reading through my application for a summer program at Jackson labs, when I saw a recommendation from my biology teacher: "Gloria has managed to be one of our top students in spite of coming from a disadvantaged background." Disadvantaged! I ran home in tears, angry at how wrong he was, asking my mother why he said we were disadvantaged, what was wrong with us. We travelled in the summers to see our family, we got to go to the beach and eat ice cream on Sundays. I never imagined it was a disadvantage to have an outdoor bathroom or to have only cold water.

During the first few weeks at college, I exchanged stories with my roommate, who had apparently had everything all of her life. She went to summer camp for 10 weeks and learned archery and canoeing. I went to camp for one

week and played baseball and swam in the creek with the bloodsuckers.

She could not understand how I could be happy, I was poor. Poor! Me. No, I had a scholarship because I was smart. She assured me it was because I was poor. No, the poor people were the ones we gave the canned food to. Suddenly I thought of the minister giving us sleds for Christmas, and our little green chips we gave to the lady on the lunchline so we could get our free hot lunch. I was shocked. Why hadn't anyone told me I was poor and unhappy? Here I had spent my whole life thinking how happy I was, and how lucky I was to have such a wonderful family and all the good things in life. My illusion was shattered. I called Mom that night to tell her we weren't supposed to be happy . . . we were poor.

I grew up one of 12 children in a four-room house in rural Maine. My folks and neighbors worked in local factories and mills. They rarely went to the doctor because they couldn't afford to miss work, and doctors were too expensive. We were treated differently because we were poor, because we were not educated. They didn't seem to understand our problems.

I grew up thinking doctors were the opponents. When I came to medical school I vowed to myself that I would not become one of them. I grew up fighting for everything I got. I wanted to continue to fight for those who could not. I begin my life as a doctor, well aware of the struggles of those without, now in the midst of those with, struggling to reconcile my two worlds.

Two vastly different worlds, one on each end of that stream. Here we are, physicians, upstream headed downstream. There they are, poor and uninsured, downstream fighting their way upstream, having to meet us in the middle. But from downstream, the journey is harsher. We've got the gear, the good boats and a guide. They've got a little boat and some paddles. What different journeys.

Now is the time to question ourselves about people without; without insurance or access to medical care, without a voice. We do need to be concerned about our careers and the drastic changes in medical care and reimbursement, but what about people in need? We are graduating with huge debts, but we're assured of a comfortable lifestyle. After all, the average salary for a physician in this country is five times that of an average family of four. People I'm surrounded by assure me that we (doctors) deserve more money because we live stressful lives.

We sacrifice so much. We do. I understand that, but people who are poor also live stressful lives. They live hand-to-mouth, day-to-day, working some of the most dangerous jobs with the fewest benefits. We have stress, but as doctors we have the opportunity for great personal reward and satisfaction in our work. They have stress, but where are the rewards?

Is it so difficult to understand the stress of poverty—those working for a minimum wage, bringing home \$128 a week, trying to feed a family of four,

ignored, degraded, made fun of, imitated, left in the hallway. We assume they know less. We don't answer their questions with the same details, respect or patience that we provide private patients, businessmen, lawyers, doctors—others who are dressed well or fit in our social circle. Why do physical exams tend to be shorter and conversations more limited when we take care of the people who are so in need? We may not notice these things because they are so subtle to us, but they are so very obvious to anyone who has experi-



Andrew Young '89 and father Robert Young '61.

sometimes unable to? Then one of the kids gets sick. Can you imagine? I can. I know them. Some actually pay more out of pocket for medical expenses than those of us who earn more money and have health insurance. Perhaps we assume that if people do not have the resources then they get free care. Many do, but many don't qualify for Medicaid because they work, or own a little four-room house, are too proud to ask for assistance, or they just plain don't understand the system. They don't get free health care, no questions asked. They can't pay the bills. Believe me, if you can't pay, you do get bills. Unable to pay them, the bills go to collection agencies. I know the tears, the frustration, the anger they experience.

People who are poor have just as much pride as people who aren't. Yet for many, medical care brings with it humiliation and suffering. They do not get the same respect and treatment as others. The homeless, teenage mothers, non-English speaking patients, the poor, the uneducated; I've seen them

encend the lack of respect, the suspicion, the anger directed at them. We seem to value these people less. Are we really in any position to make a judgment, place a value or social worth on people? I believe we would all answer no. Yet have you ever stopped and listened to us?

I remember one day on rounds hearing "and so the V.A. hospital is a great opportunity for students; there are never enough doctors so you will be able to practice procedures. They are a good a population to practice on." Practice . . . practice on . . . good group to practice on.

I thought of my uncle who died in a V.A. hospital, all the families who depended on the V.A. because they had no private insurance. I saw the older men walking around in grungy yellow hospital pajamas, a group sitting in the smoky lounge playing cards, a lonely 60-year-old man with unexplained neurological problems. He placed his total trust in us. He was not for practice, he was my patient.

What we're talking about here is quality of care and access, or rather lack of access for the poor. We don't want to believe it's true, not in the richest nation in the world. I believe that a man with a gunshot wound would get excellent treatment in any emergency ward in the country, regardless. What about other medical needs?

What about my little brother who had a punctured eardrum and needed an operation that cost \$3,000? Without health insurance, with five kids still at home, living on less than \$12,000 a year, my mother couldn't afford it. That is why today he still has a punctured eardrum. I came into medicine wanting to take care of the poor, those without, vowing to be a voice for the often forgotten people. Yet, here was someone in my own family who needed medical care and I couldn't do a thing. I'm told that everyone gets the medical care they need, yet time and time again I see people in need, almost always poor. This is what we are surrounded by, if only we open our eyes, if only we listen to what they are saying to us.

In medicine we love to talk about the wonderful experiences, the successes, what a difference we've made in people's lives, what a difference they've made in ours. I, too, have been thrilled by success, touched by role models and patients. However, we are uncomfortable discussing the disappointment, the disillusionment, the bad experiences. We are afraid to open our eyes to reality. People really are treated differently; I've seen it, I've felt it.

Just look at the statistics: 14-25 percent of the people in the United States are uninsured or underinsured; the United States has a shamefully high infant mortality rate; black people have a shorter life expectancy than white people; minorities make up a disproportionately large percentage of the poor; the poor are often sicker and more debilitated by the time they seek medical attention. What can we do? So many of these seem like social issues. They are social issues but medicine is an art, not just a science. The challenge for us is to care, to speak up, to try to understand that journey upstream.

We do not have to throw away our guide and good boats, though many of us might benefit from the experience of trying to move upstream against the current. Rather, let's go downstream where they are, let's offer them an experienced guide and some good boats, let's go so far as to share that journey upstream together. □



CLASS DAY

The Kindness of Strangers



by Chris Wallis '89

In a class he taught here at Harvard Medical School, psychiatrist Robert Coles often reminded us of a quote from Flannery O'Connor: "Mystery," she wrote, "is a great embarrassment to the modern mind." Over the course of our medical education, some of life's mysteries have been partially illuminated. Birth, we know, occurs in the basement of the Brigham and Women's Hospital, after the pitocin drip is begun, the epidural placed, and the scalp pHs obtained. Death, we have learned, is announced not by a crescendo of sentimental music, but by the crackle of a terse code call. It's impressive how quickly the jargon, the procedures, the diseases have become familiar, even reassuring to us. And it's easy to forget how complex, intimidating, even frightening medicine can be to the uninitiated.

Today, patients often come to medical attention with deceptive sophisti-

cation—they've read the *Newsweek* article on coronary artery disease, seen the PBS special on AIDS—yet, ironically, they are more alienated than ever from sickness and from death. These do not routinely occur at home—as they did throughout much of human history—but instead they have been split off from our daily lives and isolated in foreign places, in high technology hospitals. Magazine articles and television specials have not fully replaced firsthand experiences. Strangely, medical progress may have heightened the mystery of illness.

Over a century ago, Tolstoy wrote of this mystery. In *The Death of Ivan Ilych*, the story's protagonist lays dying pondering the "floating kidney" his physicians have diagnosed, wondering if his fall from a stepladder dislodged it. Today, Ivan Ilych would be CAT scanned, tissue would be obtained, a diagnosis—pro-

bably cancer—would be made. Our experience, as physicians, has radically changed. But I wonder if the patient's experience—as he or she looks at the blurred image on the flimsy piece of film and listens to foreign words like “adenocarcinoma”—I wonder if their experience is really much different from Ivan Ilych's, as they ask themselves why this has happened, and, more importantly, why this has happened to me.

An incident I remember strongly from this education happened early on, in my first-year tutorial. In groups of three or four, we were taken by clinicians to see actual patients—not the vague abstractions we imagined back in Amphitheater C, but living, breathing, ill human beings. First we heard the history: A 39-year-old diabetic, a heavy smoker, who had just had a right below-the-knee amputation. We went to the patient's room and crowded around his bedside. The physician tersely asked about his recovery. Then, a pause. And the physician said, “I suppose you won't be smoking any longer.” The patient's illness was no mystery to this physician. The progress of diabetic vascular disease had been hastened by cigarette smoking. In short, the patient had sinned. This physician—armed with his scientific understanding of illness—had come to pass judgment.

And yet, scientific understanding only partially illuminates the mystery of individual illness. Cigarette smoking, unsafe sexual practices, excessive alcohol intake: scientific study leaves little room for doubt that the probabilities of coronary artery disease and AIDS and liver disease soar skyward in populations of patients with these habits. But our data describe the behavior of groups. Every individual in a given risk category does not become ill. The fundamental question—the fundamental mystery—of why some become ill and others remain well persists, despite scientific advances.

Our education at HMS has focused more often than not on that which can be generalized, on that which is scientific. One of the more damning observations made on morning rounds is the statement: “There's only anecdotal evidence for that conclusion.” Case reports may be suggestive, but it's double-blind crossover studies that we crave. We learn, however, not only from large-scale Framingham studies, but from experiences with individual Framingham patients. John Dewey observed, “The local is the only universal, upon that all art builds.” The local experience—the individual experience—is essentially anecdotal, not necessarily

generalizable. The sum of these experiences provides an understanding that is largely subjective and intuitive, different from but complementary to scientific understanding. This understanding allows us to meet our patients where they live, to treat them as individuals with coronary artery disease, rather than as examples of coronary artery disease.

It's not always easy to meet patients where they live, especially certain patients—smokers, the obese, alcoholics, IV drug abusers. We're tempted to step back, to pass judgment. And yet these patients who don't conform to our recommendations, they need us not to withdraw in frustration, they need us to refrain from judgment, perhaps remembering to “let he who is without sin among us cast the first stone.” They need us, and we need them—perhaps more than we know—to teach us of the exigencies of individual lives that defy generalization, that defy scientific understanding.

It's no accident that we speak not only of diagnosing or treating or even curing, but also of caring for patients. I remember George Diamopoulos' parting shot to us at the end of his pathology course, a quote not from Osler or Cannon, but from an alcoholic and a drug abuser—the playwright Tennessee Williams. In the guise of Blanche DuBois in *A Streetcar Named*

Desire, he said, “I have always depended upon the kindness of strangers.” Our patients, too, are depending not only on our ability to stay with them as they confront the mysteries of their lives and actions, the mysteries of their illnesses and eventual deaths—they're depending on our ability to care, and our capacity for kindness. □

Lasting Gift

Although graduates from the Class of 1989 have picked up their diplomas and headed off to internships and residencies around the country, a small piece of the class has stayed behind.

The 1989 class gift, initiated by Richard O'Donnell '89, was established to help low- and middle-income students purchase costly medical books. The fund is seeking contributions toward its endowment goal of \$10,000.

Those interested in making contributions should contact O'Donnell at 617/391-5698, or send them to the Harvard Medical School Class of '89 Gift Fund, 25 Shattuck St., Boston, MA 02115. □





ALUMNI DAY

When the Class of 1964 remembers its 25th reunion, alumni will most likely reflect on how classmates have or haven't changed, new angles on old ideas, and, perhaps regretfully, the cold weather. All but a few paid their often humorous, sometimes bitter respects to the cantankerous wind, either from the podium, huddling in groups shivering under summer raincoats or in reunion reports. Class agent Robert McCarley '64 puts it well: "Alumni Day was highlighted . . . by weather so cold and blustery that many of us remembered well why we had left New England."

Just as the cool temperature demanded attention, so did this year's Alumni Day speakers, whose discussion explored some of the most basic principles in the making of a physician: ethics, compassion, and moral responsibility.

James Sabin '64 led this inquiry as he explored the role of ethics in medicine and medical education. For years, American physicians have enjoyed the luxury of self-regulation. Yet when doctors forgive, or at the very least, inadequately condemn a breach of ethics and the loss of a patient's trust, the

privilege of self-regulation is at risk. If the medical community does not shoulder this responsibility, Sabin warned, it will end up "struggling to clean up the oil after it has inundated the shoreline."

A medical student's suicide at the University of California, San Francisco prompted Nancy Kaltreider '64 to explore the emotional lives of medical students. "The window into their world," she said, "was sobering." She urged others to attempt the journey at their own schools and to play a larger role in developing a student's emotional abilities along with the intellectual.

Moderator Robert Lawrence '64 appealed to the universal responsibility of physicians to speak out for the basic human rights of those unjustly imprisoned and tortured. Through his work with Physicians for Human Rights, Lawrence has travelled to Czechoslovakia, Chile and elsewhere to demand the

release of prisoners of conscience, several of whom have been physicians themselves. He urged others to become involved, in whatever way, in this "very gratifying" process.

Alumni Association student essay prize winner, Joe Rhatigan '92 reflected on the "The Longing for Medicine." Rhatigan called it a "dull ache, a reverberating hollowness born out of compassion and empathy. It is the longing to heal and be healed." Placing second in the contest was Sally Jody Heyman '89 for her essay "The Chicken and the Egg."

Though the weather was windy there was plenty of news to warm the soul—if not the feet—under the big tent. Foremost was the planning for the centenary celebration of this "illustrious or semi-illustrious organization," as William McDermott '42, director of alumni relations, characterized the Alumni Association.

Dean for Students and Alumni Daniel Federman '53 traced the association's history back to November 26, 1890 when a group of Harvard Medical School graduates met over dinner in downtown Boston and decided to form the organization.

"Unlike a lot of things that doctors get together and decide to do, this one actually happened," Federman said. And so it is that one-hundred-minus-one years later, the association continues.

During the following business meeting, Paul (Pepper) Davis '63 and E. Langdon Burwell '44 of the Alumni Survey Committee discussed the association's search into the "problem" of physician discontent. The committee is surveying HMS alumni regarding their attitudes towards their careers. Next June, a symposium will address the survey results and attempt to initiate dialogue on suggested solutions.

"Most of us feel that we have practiced in the golden age of medicine," said Burwell. "At the same time we have seen storm clouds on the horizon."

Following unanimous approval of a motion from the floor to dispense with the reading of the minutes, Joe Murray '43B, chairman of the alumni fund, commended alumni for the highest percentage rate of giving ever, resulting in \$2.2 million for the School. Nineteen classes exceeded 60 percent and 5 classes surpassed 70 percent participation.

As the last bang of her gavel rang out over the 99th annual meeting of the HMS alumni association, president Doris Bennett '49 turned the high office over to incoming chief executive Claire Stiles '56, thus bringing to a close the 1989 proceedings of the association. □

The Healing Arts and Human Rights



by Robert Lawrence

During the last six or seven years, those of us here at the medical school have been stimulated by Dean Daniel Tosteson's leadership to discuss medical education and to debate the merits of problem-based small group instruction. In these discussions, the Dean has frequently recounted the answers to his question to other alumni: "What do you remember as the most important educational experience at HMS?" Invariably, the respondent includes the name of some faculty member who was central to the experience. So am I indebted to David Rutstein, Thomas Weller, Edvard Kass, and Alfred Kranes for helping me develop a personal vision of how far-reaching the opportunities and challenges of medicine are.

My classmates will remember that during the Cuban Missile Crisis, Dean Packer Berry, intending to reassure, came to Amphitheater D and told us before one of our lectures, "Put away the *New York Times*, concentrate your

attention on the task of studying medicine."

To shut out the problems of the world because we were unable to influence their resolution was not satisfying. In contrast, Drs. Rutstein and Weller urged us out into the world, first to understand the relationship between social conditions and health status, and then to act on that understanding. Or again, as Dean Tosteson is fond of quoting Virchow, we must recognize that "medicine begins in politics—politics ends in medicine."

After the Holocaust and the attendant horrors of World War II, a series of covenants and declarations were made to protect the rights of humanity. The United Nations in 1948 issued the Universal Declaration of Human Rights with its 30 explicit statements covering social and political rights, as well as the basic right to be safe as a person, in mind and body. The Nuremberg Codes stated that minimal guarantees for the protections of experimental subjects must be at all times honored, and they describe the duties and responsibilities of the investigator. The Geneva Accords of 1949 broadened and defined international agreements regarding the protection of civilian populations in time of armed conflict and reaffirmed the concept of medical neutrality.

Yet despite these codes, and more recent ones bearing specifically on the medical profession such as the Tokyo and Hawaii declarations, the safety of the mind and the person hangs by a slender thread in many parts of the world. A full half of the 170 countries of the world currently hold prisoners of conscience—individuals who have not advocated nor participated in violence but are imprisoned for their beliefs. One-third of the governments, according to Amnesty International, systematically use torture to extract information, terrorize their opponents and brutalize their own people.



So what can we as physicians do about this? In the spirit of case-method teaching, I will briefly present two cases and then conclude with the description of some of the Harvard Medical School faculty, staff and students, representing a wide range of specialties, who have participated in human rights advocacy work.

The first case is that of Chile where Jane Schaller, Class of 1960, is very active. She is also one of the founding members of Physicians for Human Rights and currently serves as its president.

In Chile, in 1981, the Pinochet regime, in an effort to clean up its public image and alter its role as the pariah of the Western world, liberalized its policies regarding professional societies. The membership of the *Colegio Medico*, Chile's medical organization, could elect its own leadership for the first time since the coup of 1973.

Dr. Juan Luis Gonzales and Dr. Francisco Rivas were elected president and vice president. They immediately launched an investigation of the members of the Chilean medical community who were alleged to have participated in torture. They subsequently identified four individuals and suspended their memberships. Drs. Rivas and Gonzales then came under attack. Repeatedly the government harassed them and finally imprisoned them in June of 1986.

In July of 1986, their colleagues in the *Colegio Medico* made an urgent call to Physicians for Human Rights, a Somerville-based advocacy group. Carola Eisenberg, our associate dean for student affairs, and I were asked if we, on very short notice, could travel to Santiago and urge the release of these two physicians.

Carola and I were able to enter the prison and meet with Dr. Gonzales and Dr. Rivas. We were also able to represent our view to members of the government, and to demand the release of these physicians and the guarantee of due process. Our voices were joined by the voices of hundreds of others throughout the world who were outraged that two physicians, acting in the finest tradition of medical ethics, should be punished for having exposed the participation of a small number of Chilean physicians in torture.

Three weeks later, in response to this worldwide demand for their release, Drs. Gonzales and Rivas were set free. They have continued to speak out, and still suffer harassment and persecution. But they speak out under the protection of their knowledge, and the knowledge of the Pinochet regime, that there

are people willing to write, willing to travel and willing to testify for these colleagues. It does work.

The second case involves Czechoslovakia—an example of the fact that the violators of human rights are not bound either by dictatorships of the right or dictatorships of the left. Physicians for Human Rights, confined in its activities by visa restrictions and access problems, has been limited primarily to advocating on behalf of victims of persecution in those right-of-center dictatorships that are all too often supported by our own government.

Late in the fall of 1987, four members of Charter 77, a Czech human rights advocacy group established at the time of the Helsinki Accords a decade earlier, were languishing in prison. They had not been brought before proper tribunals, and their health was in severe danger.

The human rights group issued a simultaneous invitation to the Soviet Union and to the United States for a physician from each country to visit and inspect the health condition of these four detainees. The idea for this approach was precipitated by the case of Leonard Peltier, a leader of the American Indian Movement who is serving a sentence for conspiracy to commit murder. He is imprisoned at Leavenworth Penitentiary and regarded by the Soviets as a political prisoner. The USSR requested permission to send two Soviet physicians to our country to visit Mr. Peltier in prison and to check on his health status. The State Department wisely said, "Sure, come ahead. We have nothing to hide."

Emboldened by this, the Czech group invited Helsinki Watch in New York to send an American physician. Helsinki Watch contacted Jonathan Fine of Physicians for Human Rights and Jonathan called me. I was involved in a January course at the Medical School and I was the attending physician on the medical service at the Mt. Auburn Hospital. I told the contact at Helsinki Watch that I could go if it could be arranged over the Martin Luther King weekend. To my amazement it was arranged. I left Boston on a Friday evening, I arrived in Prague on Saturday and spent the next 60 hours meeting with family and friends of the prisoners, officials at the U.S. embassy and officials of the Ministry of External Affairs of the Czech government. I was unsuccessful in entering the prison, but I did extract a commitment from the Ministry of the Interior to investigate the reports of poor health of the Charter 77 members and to report back to me.

I met with the family members of these four prisoners. One of them was named Pavel Wonka, a 35-year-old mechanic from northern Bohemia. He had been sentenced in May 1987 to 21 months of imprisonment and three years of protective supervision. His "crime" was an attempt to participate as an independent candidate in the elections for the Federal Assembly in the spring of 1986, and for that he was charged with agitation against the state.

He was incarcerated at Minkovice Prison, a maximum security institution noted for its harsh conditions. He was repeatedly harassed and beaten, spend-



ing long weeks and even months in solitary confinement. When he appeared in court for an appeal hearing in September of 1987, his poor physical condition shocked his family and friends. That precipitated the initial invitation to send a U.S. and a Soviet physician.

Mr. Wonka later stated that he had also received an injection of a drug just before his appearance in court that lessened his ability to perceive what was going on around him and to defend himself adequately. He was finally transferred to a psychiatric hospital in December of 1987 and remained there until his release in February 26, 1988 about a month after my visit to Prague. On his release, he had to be carried from the vehicle that brought him home because of his inability to walk; and reports indicated that he was quite thin and his legs were very swollen. Now remember, this was a 35-year-old man who had been in good health at the time of his imprisonment.

I was still attempting to return to Czechoslovakia to follow up on the tentative agreement from the Department of the Interior to allow me to visit one or more of these prisoners, when we learned of Pavel Wonka's death in prison. He had been re-arrested in March for refusing to keep silent about the harsh conditions at Minkovice. In early May when he died, I called the Czech embassy and told them that I had been invited by the prisoner's mother to witness his autopsy to confirm that he had not died as a result of punishment. Again to our utter amazement, not only was I granted a visa under emergency circumstances, but I was allowed to invite a colleague from the University of Chicago—Robert Kirschner, a forensic pathologist—to accompany me to Prague. We were allowed to then repeat the autopsy that had already, of course, been done.

What we saw was the emaciated but still handsome corpse of a man on whom a technically fine forensic autopsy had been performed. We were able to confirm that there was no evidence of deep muscle injury consistent with physical beating, and that the most probable cause of death was pulmonary embolism. It was clear that the Czech government had allowed us to repeat the autopsy in the hope that we might sanitize this whole episode. We were asked if we would be willing to be interviewed on Czech National Radio.

Dr. Kirschner and I rehearsed carefully what we were going to say and we allowed the interviewer no opportunity to interrupt or to take our somewhat contorted and convoluted language in

a way that would be amenable to taping and splicing and so forth. We made the statement that it was our judgment that, yes, Pavel Wonka had died of a pulmonary embolism, but that a 35-year-old man should not have been suffering pulmonary embolism. The proximate cause of death, while not directly attributable to his warders, was the fact that he had been denied due process, that he had been imprisoned against his will, and that he had been treated harshly with periods of solitary confinement and lack of exercise.

I don't know whether we'll ever get back to Czechoslovakia, but we have heard since that visit that the other three prisoners were ultimately released, and that there is now, with the improvement in East-West relations, a greater sensitivity to the human rights issues of Eastern Europe and the Soviet bloc.

I want to conclude with several brief descriptions of the number and kinds of different individuals who have participated actively in human rights here at HMS and at other health institutions. We have, I believe, the only undergraduate student group actively involved in human rights advocacy work at a U.S. medical school. I hope that this example of Harvard Medical School students will be emulated. One of our current students, Gabriel (Gabby) Otterman, deserves an enormous amount of support and commendation for the way he has organized almost a hundred other HMS students to be active participants in writing letters. They frequently go to the open common room in the Medical Education Center, sit down there during the lunch hour and write letters in response to urgent action appeals from human rights groups. Other students and faculty come along and wonder what's going on. Occasionally, they will sit down, be drawn into the process and add their names to these letters of protest.

Forensic pathologists have gone to Argentina to participate in the identification of the mass remains of the reign of terror when 10,000 people were killed. Geneticists have worked with grandparents to unite the children of the disappeared in Argentina and other Latin American states with their grandparents. Toxicologists from the Harvard School of Public Health and the University of California have traveled to Turkey to document the use of poison gas by the Iraqis against their Kurdish minority group. And more recently, a group went to the Soviet Union to the state of Georgia to document and investigate the use of a particularly toxic form of tear gas that had not been used

to anybody's knowledge since World War I.

Jennifer Leaning, the head of the Emergency Medicine Department at the Harvard Community Health Plan, went to Gaza and the West Bank and more recently participated in the mission to Soviet Georgia.

Psychiatry; I have already mentioned Carola Eisenberg; Larry Hartmann from the Class of 1964 has been to Chile and most recently to South Africa on human rights missions. Pediatrics; Jane Schaller, in addition to going to Chile and South Africa, was instrumental in arranging for the treatment of a paraplegic Guatemalan child caught in crossfire in the violence against the Guatemalan people.

John Constable, a plastic surgeon from MGH, has traveled on missions to a number of countries. Most notably he was involved in the care of Carmen Quintana, the 19-year-old woman who was doused with gasoline by the Chilean security forces and set on fire in an episode that many of you will remember.

Family medicine; Paul Epstein has been to South Korea to investigate the excessive use of toxic forms of tear gas against civilian populations, and has been on missions to Central America. And finally, neurosurgery; Peter McLaren Black has been invited to participate in the care of a Soviet dissident because the Soviet government judged it to be in their best interest that there be no doubt about the quality of care that this person received after suffering a closed head injury.

So regardless of your specialty, regardless of your place in the medical world, raise your voice, participate in a fact-finding role, in a treatment role, or simply write a letter and be part of the process of the shame of exposure. You can make a difference. I hope you will respond the next time you are asked to write on behalf of someone who is being persecuted anywhere in the world because of their political or religious belief. I can assure you that it makes a difference and the results are very gratifying. □

Robert L. Lawrence '64 is the Charles S. Davidson Associate Professor of Medicine, director of primary care at HMS, and chief of medicine at Cambridge Hospital. He was a founding member of Physicians for Human Rights and is currently a member of the Committee on Human Rights of the National Academy of Science and a member of the Committee for Health and Human Rights for the Institute of Medicine.



ALUMNI DAY

Ethical Education: Will Neglect Lead to Crisis?



by James E. Sabin

When I told my 84-year-old father that I would be speaking about medical ethics at this gathering, he said that while he was happy to hear that I was keeping so active in my middle years, he felt he had to tell me that to him, medical ethics is a very dubious topic. He had heard a lot of talk about it but he didn't think it meant very much when he looked at how doctors actually behaved.

After a fleeting moment of self-chastisement—in which I told myself that by this age I should know better than to present an unwritten talk to my father—I had to agree with his critique. There is a lot of talk about medical ethics and it isn't clear what it all means.

When the Class of 1964 graduated, medical ethics did not exist as a distinct field. In 1964, the *Index Medicus* listed 140 articles on medical ethics. Twenty-five years later, it lists more than 700, with six specialized journals devoted to ethics. The first think tank on medical ethics—the Hastings Center—was founded five years after we graduated. By a happy coincidence for my

talk, even as we speak here today in Boston, the Hastings Center is celebrating its 20th anniversary in New York.

In this talk I want to address three related questions:

First, why has there been such an explosion of interest in medical ethics?

Second, what has all this activity accomplished?

And third, using the Class of 1964 as an example of mid-career physicians, what is our relationship to the field of medical ethics? In the terms we used in medical school, should we be *watching* ethics, *doing* ethics, or *teaching* ethics.

So let's start with the first question: why is medical ethics such a growth industry? A "doctor basher" might answer the question by comparing current physicians—us—to the Francis Weld Peabody's of yesteryear and conclude that the study of ethics has grown as an effort to remedy our moral failings. Personally, I doubt that we are, ethically either much better or much worse as a group than our predecessors were. Therefore, until contrary evidence emerges, I'm not inclined to explain the

growth of medical ethics on the model of Old Testament prophets who came to upbraid and correct the moral failings of the flock.

But if our unique failings as currently practicing physicians do not explain the emergence of medical ethics, what does? During the past two years, I have been involved in developing and testing a curriculum in ethics for HMO physicians, and in the course of doing this I have concluded that there are three essential reasons why medical ethics is growing so rapidly.

First, in the aftermath of Vietnam and Watergate, American society trusts all the professions much less than in the past. And when trust is reduced, concern with ethics goes up.

The second reason is that technical advances in medicine, like mechanical ventilation, have profoundly altered the process of death and dying, and more recently, with in vitro fertilization, conception and birth. When the definitions of life and death are shifted, basic values are challenged and again concern with ethics goes up.

Finally, society's panic about the cost of health care is raising the issue of how fairly we allocate our resources and just what level of quality every American has a right to expect. Since fairness and rights are among the central questions of ethics, it is also clear that the preoccupation with cost also drives our preoccupation with medical ethics.

So, given that the changes in medicine and society over the past 25 years have shaken the level of trust between all professionals and their clients, raised major issues about fairness and rights in health care, and have challenged the basic definitions of life and of death, it is no surprise that the study of medical ethics has mushroomed.

But what has all this study accomplished since the Class of 1964 graduated from HMS 25 years ago. My way of providing a brief answer is to examine how we think about death and dying.

When we were doing our clinical rotations in 1963 and 1964, we didn't know whether a patient whose respiration and heartbeat were being sustained mechanically was dead or alive. The centuries-old definition of death as cessation of respiration and circulation told us that the patient had to be seen as living. But in many situations, that conclusion simply didn't make sense.

In 1968, four years after our class graduated, Harvard Medical School played a central role in resolving this highly disturbing impact of new technology through the ad hoc committee

on brain death. That committee was the first to dissect out principles for interpreting the new clinical facts created by the new technologies. The ad hoc committee's report, combined with the research and debate that followed it, allowed the President's Commission for the Study of Ethical Problems in Medicine to make a definitive consensus statement on brain death in 1981. That pithy statement, that "an individual who has sustained either irreversible cessation of circulatory and respiratory functions or irreversible cessation of all functions of the brain, including the brainstem, is dead" allows today's students to be taught to distinguish life from death with a clarity impossible in 1964.

But a recent study showed that only one-third of a group of doctors and nurses working in ICUs really understood the new criteria for determining death. This tells us that while the medical profession can be proud of having developed a deeper understanding of what death is, and a succinct and revised set of criteria for determining when death has occurred, as teachers we have not done at all as well in implementing this new definition.

Harvard Medical School has also made major contributions to clarifying the ethics of terminal care. The March 30 issue of this year's *New England Journal of Medicine* included a report on "The Physician's Responsibility Towards Hopelessly Ill Patients," developed at a meeting at Countway Library chaired by Dean Federman. This article presents a similar picture of what

has and has not been accomplished in medical ethics. The medical profession, the courts and the public at large have developed a relatively clear consensus on the principles that should guide the often agonizing decisions about terminal care. Thus, for the patient who is brain dead, there is no longer any uncertainty about whether to interrupt treatment. Since the only treatment appropriate to a dead person is respect, it is obligatory to interrupt so-called medical treatment.

Similarly, in a bizarre and misguided murder case, charges were actually brought against two California physicians who had complied with the patient's and family's wishes to interrupt treatment for a patient who was terminally ill. Even in California, the court was wise enough to throw out the case. Our society has concluded that it is clearly ethical and legal to interrupt treatment in situations of terminal illness when doing so reflects the wishes of the patient or the patient's surrogates.

Although the medical profession has participated in leading society to this new interpretative consensus on what death is and what principles should guide decisions about terminal care, we physicians have not done what we need to do to implement what has been achieved in medical ethics. Although most states now have statutes supporting the development of living will and durable power of attorney arrangements, we physicians have not instituted rigorous training, or other supports, to put this hard-earned consensus regarding principles into practice. If we conducted

surgical practice the same way we conduct the area of ethics we would not be teaching students how to tie knots and would not count sponges before closing the incision.

Recognizing that the conceptual achievements of medical ethics haven't been matched at the level of practical application, let's turn now to the question of how to define the role of practicing physicians in the field of ethics. How much are we practicing physicians *learners* in an area in which we need to be instructed, and to what extent are we the real experts or *teachers* of this field?

I believe that the correct answer is that we are both: experienced practicing physicians need to teach and to learn simultaneously. In the remainder of this talk, I will try to explain why this double role is so important.

In my work at the Harvard Community Health Plan I was recently asked to meet with our Infertility Review Board to help it consider how it should establish guidelines for the donor oocyte program, which in Massachusetts is part of a legally mandated set of infertility treatment requirements. Should there be an age cutoff for eligibility, and if so, what age should it be?

Massachusetts requires insurers to pay for infertility treatment that is "medically indicated." But how does one determine whether it is indicated to take an egg from a younger woman, fertilize it in vitro and implant it in a post-menopausal 46 year old? Medical science can present data on the average age at which menopause occurs. Likewise physicians can obtain rough estimates of the likelihood of successful pregnancy following implantation of a fertilized ovum into the uterus of the potential patient. But these medical facts do not answer the fundamental question of whether to regard menopause as an ailment to be overcome, or as a biological occurrence to be respected.

Wisdom requires that in circumstances like these, physicians follow Socrates' advice to recognize our own ignorance. If we are asked what is medically indicated, we need to answer that we simply don't know, just as before the definition of brain death we couldn't say whether the patient with a flat EEG and absent corneal reflexes was dead or alive.

Answering questions like this is the job of the whole society, not just physicians. If medical ethics were simply an academic study, each medical student could write his or her answer to an exam question with no harm done. But ethics is not academic in this narrow



sense—it is really about resolving conflicts of value in situations requiring action. Turning off the ventilator cannot be ethical in one hospital or one state and immoral or criminal in another. Physicians, patients and society need to reason together to reach consensus about which values should prevail.

When medical science and the structure of medical practice changed slowly, society did not need special commissions like the Presidential Commission to address ethical issues in medicine. But with new technologies—like being able to create pregnancy in post-menopausal women—emerging so rapidly, physicians need to encourage creation of entities like the President's Commission on Ethical Problems in Medicine to help society digest the implications of new technologies and provide the needed ethical guidance.

Although physicians contribute in crucial ways to the kind of inquiry that allowed a revised definition of the cri-

teria for determining death, we basically play the role of *learners* because medicine cannot determine the outcome of this kind of ethical inquiry but must await its results. Physicians can provide facts and give advice, but social process determines how values will be balanced and ultimately determines the consensus by which we practice. Just as Harvard Law School learns law from the Supreme Court, the medical profession learns its broad ethical guidelines from the society in which it practices.

Recognizing that medicine must support, but cannot dictate, creation of the ethical framework for our rapidly evolving practices shows how physicians must be learners of medical ethics. But now I want to shift to an extreme and possibly far-fetched example to help define the way in which practicing physicians need to be teachers of ethics. This winter a vigilant and active local medical publication—*The*

Boston Globe—reported that a current malpractice suit had brought to light that a psychiatrist in Boston had been accused 13 years ago of having entered into a sexual relationship with a patient, and had acknowledged the truth of the accusation to a particular medical organization. That organization required him to refund the fees paid by the patient and to have a period of treatment and supervision. They did not notify the state licensing board, the Board of Registration in Medicine, nor did they inform the women's college where he directed the counseling service!

Now at the time that the original incident came to light 13 years ago, the disciplinary action taken by the medical group was totally consistent with standard practice. But was standard practice an adequate guide? Was it appropriate to let this physician continue to treat patients? In my view it was not.

Understanding what an incident like

A Choice Evening



HMS alumnae (l-r) Jeanette Corwin '58, Gertrude (June) Murray '54, Kathleen Mogul '52, Carmen Goldings '54, Doris Bennett '49 and Renee Gelman '50, share a toast at the HMS Women's Dinner.

More than 150 Harvard Medical School alumnae and women students celebrated and contemplated their roles in medicine as the fourth annual HMS Women's Dinner converged on Vanderbilt Hall. Forty years ago, the few women finally permitted to enter the school weren't allowed to live in the school dormitory, according to moderator Doris

Bennett '49, one of HMS's first alumnae. But this year, HMS women nearly filled the once-forbidden hall, where they dined and listened to a panel discussion on "Specialty Choices for Women in Medicine."

Jane G. Schaller '60, David and Leona Karp Professor, chairman, and pediatrician-in-chief at Tufts University School of Medicine, began by

reflecting on the effect women have had on pediatrics. More than 50 percent of recent medical school graduates in pediatrics are women, and it appears that women will dominate this field for some time. Cultural barriers however, prevent women from taking a leadership role in pediatrics, Schaller said; women chair only 5 of 135 American pediatrics departments.

To help remedy this problem, Schaller proposed that career development advisement become integral to the medical training process for women. Also, the issues of disproportionate reimbursement for women must be assertively addressed. These programs could help reverse negative societal attitudes towards women, so they can assume the role in pediatrics that their numbers justify.

"There will always be room for more good doctors in pediatrics, whether they are men or women, and I think it's time we stopped counting," she concluded.

"Can a feminist be a surgeon?" asked Susan Love, director of the Faulkner Breast Center and clinical associate in surgical oncology at the Dana-Farber Cancer Institute (DFCI). "Of course," she answered, "a feminist can be anything she wants to be."

this has to do with the teaching of medical ethics comes from a proper recognition of what teaching really is. Teaching is not just imparting knowledge and skill. The root from which the verb "to teach" comes is "to show," and teaching in medical ethics is in large measure *showing* what medical ethics is. Concepts and analytical skills are important, but teaching or showing involves much more than imparting concepts to sleepy students in Amphitheater D.

Thus, although psychiatric educators in fact do need to do more teaching about the code of ethics of the American Psychiatric Association and the circumstances in which violations have tended to occur, the crucial kind of teaching required is not preaching about principles to medical students and residents. It really doesn't require a graduate seminar in medical ethics to know that it's wrong for a psychiatrist to have a sexual relationship with his patient.

If the psychiatric community that I

am part of chooses to teach ethics by slapping the wrist and looking the other way, other parts of society will fill the vacuum. And in fact, Bill H936, currently pending in the Massachusetts legislature, proposes to fill the vacuum by making the physician who has sexual relations with a patient guilty of rape.

Similarly, it is all too common for hospitals that discover unacceptable conduct in a member of the medical staff to remove that person from the staff but to do nothing more. Sometimes—and this has happened in Boston—recommendations are written with no mention of the inappropriate conduct. This kind of misguided protectiveness is ultimately a failure on our part to be effective teachers. Mid-career physicians have a crucial teaching role to play by showing that the ethical consensus means what it says. If we abdicate this aspect of our teaching role, legislators, regulators, and malpractice litigators will rush in to do our teaching

for us. Their teaching methods tend to be punitive and not imbued with the values of the New Pathway.

As a profession, our approach to solving problems is too often modelled on the paradigm of CPR—we wait for the crisis and then start pounding on the chest. This is an ideally unsuitable approach for handling the complex ethical questions that emerge from the new technologies and the new organizational structures within which medicine is practiced. If we adopt this CPR approach in ethics, as a profession we will surely again and again find ourselves in the situation of the Exxon company struggling to clean up the oil after it has inundated the shoreline. □

James E. Sabin '64, practices psychiatry at the Harvard Community Health Plan, is acting director of the Teaching Center of the Harvard Community Health Plan, and is a lecturer of psychiatry at HMS.

"Is it easy?" she continued. "Hell no."

Love warned that surgery is based on a male-centered culture from which most women have traditionally been barred, and discouraged women from trying to be part of the operating room "old boy network." Instead, Love urged women to "push at the norms" and base specialty choices on independent personal interests, not on what is discouraged or encouraged.

Statistics both optimistic and grim checkered Pat Reiker's talk: "Specialty Choice in the 1990s: Reality or Fantasy." Reiker, assistant professor of sociology at HMS, and director of psycho-social research at the DFCL, compared 1960, when 5.7 percent of American medical school graduates were women, with 1989's 34-percent-female graduating class. The trend promises to continue; while the number of men applying to medical schools is declining, the number of women applicants is increasing.

That was the good news. The bad news, said Reiker, is that women in medicine follow the same patterns as those in other professions: they earn significantly less and occupy fewer leadership positions, such as full professorships. Women are also failing to venture away from the "tra-

ditionally female fields" such as internal medicine and family practice. While only 18 percent of women choose surgery, radiology or orthopedics, Reiker said, nearly a third of all male physicians enter one of these fields.

Future alumnae Louise Aronson and Theresa Marie Quinn, both '92, considered the "First Year and Beyond: The Search for Role Models," in a presentation that juxtaposed perceptions of current women HMS students with the relative lack of women mentors at the School. They called



HMS students Elizabeth Biegelsen '91, and Sally Holtzman '91.

on alumnae to help fill these role model vacancies.

Two weeks before the dinner, Aronson and Quinn surveyed first-year women students on their impressions of attitudes towards women at HMS. They shared some of these varied responses:

I think one of the things that struck me the most at the beginning of school was the lack of women. None of the tutors I knew or had were women, there were no women lecturers, none of the society masters were women, there are no busts of women in the Medical Education Center, or for that matter, pictures of women in the library.

I see the New Pathway as a more feminist, and therefore more humanist, curriculum than the traditional pathway.

If anyone ever questioned the importance of the HMS Women's Dinner, Bennett happily allayed any doubts: "If there were no need for a women's dinner, I don't think we'd have so many women come." The numbers keep growing—the first dinner attracted only 50 women in comparison. If the enthusiasm at the fourth is any indication, the 40th dinner will overflow Vanderbilt Hall and fill the quad. □

—Terri L. Rutter

Response to a Student's Suicide

by Nancy B. Kaltreider

It is a great honor to have been invited to speak here today. It is an honor and a role far beyond my imagination in '60 when, quaking in my seat during orientation as one of five women and a handful of State University graduates in the class, I felt myself to be a distinct outsider whose fraudulence would soon be exposed.

For me, I think there were clear stressors in this new environment; the awful morning of the first week walking into the scrutiny of the very male dining room at Vanderbilt Hall when someone loudly announced "she looks tired today—I bet she has her period." My prevailing sense was of aloneness that could not be shared, weakness that must be hidden from my frighteningly competent classmates. My first contacts

with our extraordinarily obese cadaver led to endless baths and dreams haunted by his bloated face—while others hid their anxiety behind macabre humor, suggested that medical school was a "gut" for them, and then studied all night behind drawn shades.

Much of medicine has changed since then—the revolution in molecular biology, major shifts in health care delivery, the recent emergence of alternative approaches to medical education. Nonetheless, the emotional climate of the medical school experience seems all too familiar.

Students are still shaken by the sudden unmasking of death in anatomy, despair of mastering the bulk of material, dissolve before the first exam, worry that they will kill a patient because they missed a lecture, feel terror before National Boards, wince with their patients when ineptly drawing blood, wonder if a low surgery grade will condemn them to an ignominious internship. There are hopeful directions in curriculum design towards more active learning and small group participation. But, if anything, technological advances and the specter of AIDS have increased the emotional pressures, yet most medical schools across the country offer very little room for slack.

The recent suicide of a medical student at UCSF led me to interview 20 fellow students about their responses and also their overall perception of medical school. The window into their world was sobering and touched many issues unresolved over years of medical education. There is no way to delineate the degree of distress secondary to a student's inherent emotional vulnerability from the consequences of the way medical schools function as institutions. However, I believe we have an unmet responsibility to bring as much humanity to the process of medical education as we advocate in thoughtful patient care.

Let me tell you more about how the

tragedy of this suicide has stimulated my thinking. In the summer of 1988, a third-year student at the University of California, San Francisco climbed onto a ledge outside the 14th floor of the medical school sciences building in the cool, gray morning fog and jumped to his death in the quadrangle below. Faculty, close friends and classmates had perceived him as relaxed, out-going and coping well with academic pressures. He had recently passed National Boards, had a solid scholastic record, was an outstanding athlete and had been competent on his early clinical rotations.

Left without clues, suicide became metaphor as his stunned classmates projected many of their own fears onto him and some developed early signs and symptoms of a post traumatic stress syndrome. Many used rigid defenses of denial and avoidance in an attempt to regain adequate composure in order to return to a productive student role.

After considerable informal contact suggested a high prevalence of both current symptomatology and chronic distress, I invited interested students to discuss their experience with me in more depth, and saw the first 20 respondents. This is what they told me.

Most students learned of the suicide on the day that it occurred, usually from another classmate. Their first response was almost universally shock and disbelief; from, "It couldn't have been a med student," to "Oh my God—it's one of us." Students were perplexed and, as no clear reason emerged, the seeming randomness of the event encouraged a sense of identification and vulnerability.

The pain was real, intense and surprising to the students. Months later, many students cried during the interview as they spoke of his imagined aloneness and their sense of loss "of a family member." Students noted an autonomic rush when they entered the quad area and unanticipated anxiety when they were on higher floors of the medical buildings or near open windows. Intrusive images were particularly troubling—images of the student standing on the ledge crying, running, jumping, crumpled in a heap, distortions of his smiling face. Some students tried to understand their preoccupation by walking in the quad or imagining the scene; others avoided the area, rescheduled their rotations to other sites and crossed to the other side of the street in helpless silence when a close friend of the suicidee appeared. A memorial service was held on campus. Many students chose to attend, arriving with apprehension but finding relief in





comforting each other as the reality of the loss came through.

A substantial number of the students who volunteered for the study felt on "thin ice" themselves with past experiences of serious suicidal ideation, family or friend suicide, or major affective illness in the family. Those who rejected the possibility for themselves worried about other classmates. In the words of one student, "The deepest pain is that his friends didn't know."

The experience of medical school as stressor was prominently voiced by each participant. There were general thoughts—the God-like role of the doctor that makes any other career a failure, the need to set a high level of expectation and to save face, the avoidance of negative feelings to preserve function; and a much more specific focus on the second-to-third-year transition. As the clerkships begin, long hours lead to the distortions of fatigue, and friendships go onto the back burner as you rotate away from all of your friends. The sense of being under constant evaluation, while feeling incompetent in this new setting, comes as a shock after the relative anonymity of the first two years.

I turned to the literature for help in bringing context to what I was hearing and found that a good deal has been said about the inherent stressors within medical school. Gaensbauer and Mizner stated that the most useful focus is "the complex and intimate interaction between the demands and stresses of the medical school environment and the adaptive capacities of the students."

They suggest that the tasks are substantial. Think and remember. In the first year, there is a whole new world within which to determine one's capacity. It is important to maintain a sense of adequacy while recognizing that there is no way to know it all. Reasonable limits must be set—a problem for the anxious, compulsive scholar that may be accentuated by the decreased structure of the New Pathway. Beyond this, it is a time to re-establish social bearings in an unfamiliar city.

By second year, fatigue and burn-out become more prominent and the question of, "Is it really worth it?" emerges. One has to confront disease in depth, often a stimulus to personal fears, and time marches steadily towards the National Boards. Third year is the period of consolidation of a physician identity, including acceptance of one's own helplessness in ultimately preventing death. Performance anxiety peaks now and the frequent rotations almost guarantee a constant sense of being inept. Exposure on the wards to intense feelings from patients and staff is quite different than the cocooned intellectual pursuits of the first two years. In the fourth year, the levels of stress and anxiety gradually decrease with an emerging sense of competence balancing that. Emphasis shifts to the choices of residency and the approaching reality of graduation and internship.

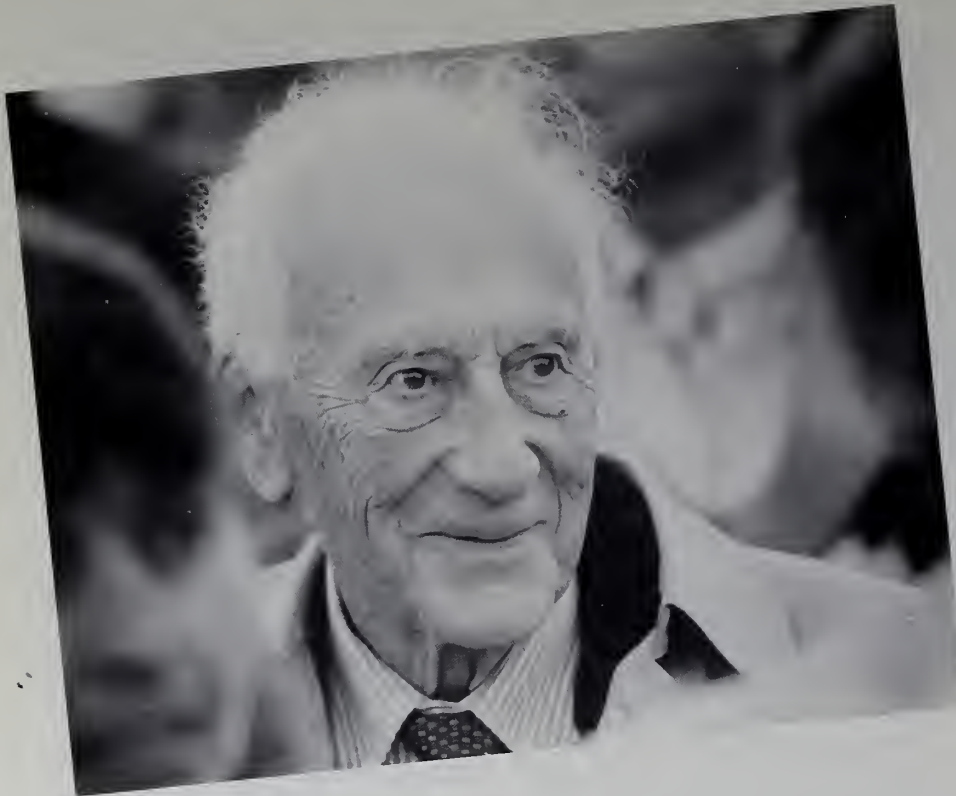
Kris suggested that the psychiatric clerkship can precipitate acute anxiety or depression, most commonly in students who have serious mental illness in first-degree relatives. Notman et al. note

that even an average performance is seen as failure by students who have never been average, and performance anxiety persists despite the availability of data that one does not readily flunk out. Huebner, et al. wrote that in this high stress environment, students may choose to fend for themselves rather than seek help, assuming that those who cannot successfully cope should not continue school.

What is the pattern of response to these stressors? A recent study by Clark and Zeldow in *JAMA* assessed the vicissitudes of depressed mood over time by following a complete medical school class from time of entry to time of graduation with repeated administrations of the Beck Depression Inventory. Their prevalence figures replicated those of two earlier studies. At least 12 percent of the class showed symptoms at a level of clinical depression at any one assessment, and 25 percent did so at the end of the second year just before finals and National Boards Part I. At that time point, 20 percent of the students gave a positive response to the item, "I have thoughts of killing myself but would not carry them out," and three students responded, "I would like to kill myself."

Roy reports that suicide is the second most common cause of death (after accidental death) among medical students. Male medical student suicide completion rates are similar to those of the young adult male population while the female medical student rates are two to three times higher than those for young adult females. The reasons for this are quite controversial; do women in medicine become socialized as men? do they have a higher incidence of affective disorder? are they more isolated or do they simply learn more about more effective lethal means—a byproduct of a medical education? In an analysis of 52 medical student suicides published by the Rockwells in 1981, the incidence clustered in second and early third year. There was no evidence of a within-school "contagion" effect and very few schools reported more than one suicide in a 7.5 year risk period.

Beyond the personal tragedy, the suicide of a medical student has a profound impact upon the medical school community. The shared pathway of training encourages both identification and projection by other students. The symptomatic toll may be highest among those who have already been touched by another suicide, or who are familiar with depression in themselves and family members. In general, students tend to use denial and avoidance as defenses to



avoid loss of function. However the study clearly suggests that intrusive thoughts and images persisted over some period of time. The risk of the sense of increased vulnerability being translated into helpless depression seems substantial in this population under continuing stress.

Harvard faculty led the way 25 years ago in describing the adaptive issues for medical students. Dr. Samuel Bojar wrote:

As the curriculum moves into the study of disease processes, anxieties stemming from fears of vulnerability and defectiveness become evident, usually associated with hypochondriacal complaints. While the fears of physical illness appear in conjunction with the study of anatomic pathology and pathophysiology, fears of mental illness appear later in the setting of close personal contact with mentally ill patients. The nature of the symptom, though perhaps precipitated by the subject matter under consideration, is most often related to the past life experiences of the student and frequently may be traced to a personal or family history of disease.

In the study, suicide as metaphor provided a distressing window into the prevalent world of depression in medical school. In the recent *Nova* program on the New Pathway at Harvard Medical School, Dr. Gordon Moore commented, "Students should be having a better time in medical school—it should

be an exciting even joyful experience." For too many, this is not the case. It is useful to recognize that both conventional wisdom and epidemiologic study identify the second and early third year as most stressful and students with a history of familial affective disorder or personal substance abuse as the most vulnerable.

What can we do as medical educators? The interviews I had with students helped to design several possible routes of preventive intervention. The development of an early physician identity with a related clarity of goal will be enhanced by increased early contact with patients and a faculty mentoring system in the first two years, quite similar to curricular changes at Harvard.

Required small discussion groups as an integrated aspect of the curriculum during high stress periods such as anatomy dissection, the start of the clinical workups and pre-Boards could reach those too avoidant to spontaneously seek help. Student Affairs could respond to information about personal crises, such as family bereavement or a failed course with reminders of the sources of help on and off campus.

I think integral to this planning is adequate provision and funding of quality student mental health services that are confidential, affordable, and as dedicated to prevention as to crisis intervention. The psychiatry curriculum

should include recognition of common risk factors and suggestions to students about how to help themselves and each other deal with the stressors.

Ultimately, it is the students who form the cohesive "family" bonds that are really the main support network. Such bonding can be encouraged by available conversation areas near the mailboxes, a variety of athletic, cultural and social events, and a schedule that includes common, open time to socialize for each year's class.

Some of the risks of high expectation and rigid defense may be inherent in our profession. Yet when students find us inscrutable and apparently flawless, they judge themselves even more harshly. I feel that open acknowledgement and support by faculty who are comfortable in sharing their own beleaguered humanity could help us all to flexibly respond to the complexities of our medical lives. □

Nancy B. Kaltreider '64, is clinical professor of psychiatry at the University of California San Francisco, and director of medical student education in psychiatry.

References:

- Beck, A., Beamesderfer, A. "Assessment of Depression: The Depression Inventory," *Modern Problems in Pharmacopsychiatry* 1974, 7:151-169.
- Bojar, S., "Psychiatric Problems of Medical Students," Blaine, G.B. and McArthur C.C. ed. *Emotional Problems of the Student*, NY, Appleton Century Crofts 1961, 217-231.
- Clark, D.C., Zeldow, P.B. "Vicissitudes of Depressed Mood During Four Years of Medical School," *JAMA* 1988, 260:2521-2528.
- Gaensbauer, T.J., Mizner G.L. "Development Stresses in Medical Education," *Psychiatry* 1980, 43:60-70.
- Horowitz, M., Wilner, N., Kaltreider, N. et al. "Signs and Symptoms of Post Traumatic Stress Disorders," *Archives of General Psychiatry* 1980, 37:85.
- Huebner, L.A., Royer, J., Moore, J. "The Assessment and Remediation of Dysfunctional Stress in Medical School," *Journal of Medical Education* 1981, 56:547-558.
- Kris, K. "Distress Precipitated by Psychiatric Training Among Medical Students," *American Journal of Psychiatry* 1986, 143: 1432-1435.
- Notman, M.T., Salt, P., Salt, P., Nadelson, C.C., "Stress and Adaption in Medical Students: Who is Most Vulnerable?" *Comprehensive Psychiatry* 1984, 25: 335-366.
- Pepitone-Arreola-Rockwell, F., Rockwell, D., Core, N. "Fifty-two Medical Student Suicides," *American Journal of Psychiatry* 1981, 138: 198-201.
- Roy, A. "Suicide in Doctors," *Psychiatric Clinics of North America* 1985, 8:377-387.

HMS Coleus Society Comes to Fruition

A fanfare of fiery red, muted pink and bright green embellishes the velvety leaves of the coleus plant. It is this tropical flora that the Coleus Society, the Alumni Association's newly formed minority organization, has adopted to symbolize its diverse membership of African-American, Hispanic-American, Puerto Rican and Native American HMS alumni.

The student-run Black Health Organization's 1988 health forum sparked the idea for a group dedicated to focusing on minority health issues. Symposium speakers examined some of the startling health issues threatening minority communities, such as a high infant mortality rate and chemical dependency. In response, society founders Michael Myers Jr. '85 and Bernard Godley '89 proposed the new society to the Alumni Council at the June 1988 meeting. The motion to incorporate the Coleus Society as a subgroup of the association was unanimously accepted.

A year later, the society celebrated its initiation with a luncheon in the Building A Faculty Room during Alumni Week.

"Bernard and I began with a vision," Myers said during his opening remarks. Central to that vision, he said, is establishing a network among the more than 400 minority physicians who have graduated from HMS since 1971.

To create this network, the society is pursuing three directives: maintaining a fund-raising drive; producing a video that will explore the contributions HMS minority alumni have made to medicine and biomedical research; and, most importantly, developing a minority directory towards which more than \$2,500 has been raised through alumni contributions.

The luncheon featured the first presentation of the Spencer B. Lewis award for service and career achievement. Lewis '73 was "a truly revolutionary physician" said Michelle D. Holmes '81, in presenting the award. Holmes traveled to Lewis' home in Grambling, Louisiana to meet him shortly before his sudden death at age 34 in 1982, and admired his dedication to medicine. "He represents all that we should aspire to in our practice and in our lives," she said.

After graduating from HMS, Lewis

returned to his home in the poverty-stricken community of Grambling. He took with him a desire to serve people who had never before received quality health services, especially from a black physician.

Despite his Harvard credentials, Lewis encountered vigorous adversaries—predominantly, Louisiana health officials. Lewis, who diagnosed himself as diabetic at age 15, suffered from increasing diabetes-induced blindness during his adult years. Local health officials objected, yet he continued to treat patients in his family practice, although almost completely blind, with the assistance of his nurse-midwife wife Mary.

Lewis' career culminated in the foundation of the Spencer B. Lewis Clinic—named and opened after his death—and the American Society of Handicapped Physicians, which he founded in 1981 as an advocacy group for disabled physicians.

The Lewis Award was granted to Alvin Poussaint, HMS associate professor of psychiatry and associate dean for student affairs, in "recognition of outstanding support and service in the minority community," said award presenter Cato Laurencin '87. "Dr. Poussaint epitomizes the concept of role model and mentor. He has been the spokesman for the social conscience of Harvard Medical School."

In accepting the award, Poussaint praised the society members' positive attitudes. "The students," he said, "have been truly inspiring to me."

In closing, Dean Daniel Tosteson congratulated the young group and reaffirmed the School's commitment to recruit and educate minority physicians. "If we're going to succeed it will depend absolutely on those of you who have formed this Coleus Society and our alumni.

"I find the moment very moving," continued Tosteson, "and a splendid fruition of the work that Al and all of you have put in over the years to make Harvard's attempt to participate fully in affirmative action for physicians a meaningful reality." □

—Terri L. Rutter



Cato Laurencin '87, Kenneth Robinson '79 and Henri Pierre-Jacques '90 at the first luncheon of the Alumni Association's Coleus Society.



ALUMNI DAY

The Longing for Medicine

by Joe Rhatigan '92

Everyone must feel it occasionally, but still it's hard to describe. I say longing but not in the strictly romantic sense, the way one longs for a distant lover, although that is definitely part of it. I would not call it a hunger or a thirst either, as in the hunger for fame or the thirst for knowledge. And a phrase like "the desire to become a doctor" is precisely what I am *not* trying to describe. The longing for medicine is something else: a dull ache, a reverberating hollowness born out of empathy and compassion. It is the longing to end suffering, to heal, and to be healed.

It is born of empathy and compassion because without these there can be no true longing for medicine. Without projecting ourselves into the body of that crippled man we pass on the sidewalk, without imaginatively sitting in his wheelchair and pushing ourselves around in it, we keep our distance and our peace of mind, for to feel a longing

is to feel restless and incomplete. We may feel pity or sympathy on such occasions, which are honest and sincere emotions, but neither breeds the longing of which I speak. Once we project ourselves into that man we often find our trite, conditioned responses—the sentimental words we utter that cheapen our language and our emotional lives—desert us. We find ourselves voiceless in the presence of his suffering; we cannot speak. This silence is not only of painful empathy but also of longing to end that pain, a longing for medicine. When we feel this yearning, a question always surfaces from beneath it, a question we both retreat to and run from, the question "why?"

This why—as in, why is this man or that woman in such pain?—is not satisfied by answers from science, politics, or economics (although each of these can provide very good answers; answers which we often do not want to hear) because this question does not seek

causes but rather asks about significance and meaning. It does not ask "Why?—what causes this suffering?"—but rather "Why?—why is there suffering?" To you or me, whose last painful moment was our visit to the dentist, this question seems naive and childish. Our world has no time for such questions, and we would answer it as my father used to, "It's just part of life." But what about the people for whom pain is constant and continual; the chronically ill and disabled. For these people, pain is not part of life, it is life. Their pain is not a place they occasionally visit, but rather a place from which there is no exit. When we encounter such people, we find that even our clichés desert us, and if we are honest, the only answer we find to our question is reverent silence.

This "why?" that we mouth silently to ourselves like a hushed prayer, is the most powerfully rebellious sound we can utter, for it calls all of existence into question. To ask why is to challenge all authority and tradition and to leap boldly from the confines of what is, into the vastness of what might be. It allows us to imagine a world where children are born without birth defects, where lung cancer does not cause painful and inevitable deaths, and where food is as plentiful as the stars, always and everywhere.

Yet "why?" can also be a trap be-





were others who were kept away by other serious obligations or illness. Our reunion began with a cocktail party on Thursday, after a full day of the scientific symposia by the 25th reunion Class of 1964. It was a stimulating and interesting day. Many of our classmates' wives attended, and Dottie Matson Martin, the widow of Donald Matson, attended with her husband, Sam Martin, a distinguished educator from Philadelphia.

Friday, Alumni Day, also feted a number of excellent presentations on subjects of interest. It was a chilly day with intermittent rain and wind outside the quadrangle; some of us without overcoats remembered Boston winters in medical school.

Friday evening we met at the Brookline Country Club where the flowers had been beautifully arranged by Eloise Ellis, with the help of Jean Stanbury, Anna Pier and Marjorie Balboni.

The program was presented by two of our own members, first by Vince Dole, who discussed the use and the future for methadone in rehabilitating the lives of those who are addicted to narcotics. He recently won the Lasker Award for his work.

The *pièce de resistance* was salmon brought from Puget Sound by Sandy and Sally Bill on United Airlines. The presentation of the technique of farming salmon in Puget Sound, above Seattle, by Sandy Bill, was fascinating.

The names of the deceased members of our class were read, and we observed a moment of silence for the 45 members lost to us. The list included many dear friends, and as much as they

were missed by all the members, the occasion was an enjoyable one.

Our reunion committee, headed by Dan Ellis with strong support from John Stanbury, Frannie Moore, Arthur Pier and other Boston members, made some important decisions which contributed to our enjoyment. First, it was decided that we would not leave Boston for the Cape, a move which inevitably loses some of our members to the fellowship that we usually have on Saturday night; second, we decided against going to the Boston Pops and disturbing the eve-

ning; but we had our own entertainment.

On Saturday morning, the reunion committee had arranged a fascinating tour that was well attended. The bus tour began at the Boston Museum of Fine Arts, and was conducted by educated and knowledgeable women. This took us through the architecture of Boston, down to the waterfront, on to Beacon Hill, and throughout the downtown area of Boston. Although most of us had been in Boston a long time, and some of us had lived there a long time, we learned a great deal we didn't know. One never realized that there were so many interesting architectural historical landmarks along Beacon Hill.

On return to the museum, we had lunch. Then the group was split according to our choices between contemporary art and European art. The tour leaders were enthusiastic professionals who taught us a great deal.

Saturday night was a high point in the week. It was led by Dan Ellis who called on Fran Moore. Frannie had written a history for *The New England Journal of Medicine* about early Harvard medicine. With the meeting in the Aesculapian Room on the second floor of the downtown Harvard Club on Commonwealth Avenue, he could go around the room pointing out the various pictures and individuals who had been important to the development of Harvard in its early days. At the end of the meeting, Fran had gotten Donna Gross, a gifted pianist from the Brookline Music School, to play for the group; thereafter, Fran and Jean Stanbury (she





Saturday evening, most, I suspect, retired while the engineers pondered (of all things) the state of their class' health and blood cholesterol levels.

In all it was a relaxed and sociable time, a time to marvel at our durability and appreciate the contributions made by so many in so many ways, and to be amazed at the wide range of activities of class members. Did you know that Cyril Jones is also a fire chief? That Lew Olmstead, after a distinguished career in pediatrics, is now a child psychiatry resident? That at least two classmates (Bahnsen and Rosenbaum) have been honored with named professorships? That Ed Lerner ran a Leprosy program for several years? That Lang Burwell, who looks just as he did in 1941, talks as if he has retired? And that Seth Crocker has cut back to a mere 80 hours a week? It was a good time. We look forward to the next gathering in 1994.

Chester D'Autrement '44

on the viol and he on the piano) played excellent music together.

Fran and his late and much-missed Laurie had previously led singing on occasions with various pieces of music from the period of 1910 to 1950. Songbooks were distributed, Frannie selected the songs and played the accompaniment, and a good time was had by all. Following this, the reunion adjourned with much handshaking and agreement that we would all be back in five years for the next reunion.

It was of interest that the Class of '39 had the largest number of members back for the reunion of any class of HMS this year, as the picture of the class will demonstrate.

—Eben Alexander '39

the student and alumni speakers. Some were able to take lunch in the new student center in Building E—a far more attractive spot than the tents. We were duly photographed amid noise and benign chaos on the stairway of Building A, and later in the afternoon a smaller group made their way through blinding rain to the Ocean Edge in Brewster. For our pains we had sun (at last), excellent quarters, large and leisurely breakfasts, and a grand clambake Saturday night. While a younger MIT reunion invited us to share their dance

40th Reunion

It was the greatest. The message garnered from what was going on during the symposia and Alumni Day and then further explained at our dinner by Gus Swanson was that, despite the recent unhappy national and state medical climate, HMS is healthy and is doing a better job than ever. The student and teaching do seem to be important.

45th Reunion

While classmates spotted each other at some of the learned symposia on Thursday, meeting at lunch was the first chance for gathering, recognition and conversation. About a third of the class met for cocktails and dinner at the Charles Hotel that evening. Dinner always gathers the greatest number and is the best time for catching up, reviewing old times, and discovering new things about each other.

The next day hardy souls sat in the chilling damp, attentive (at times) to





Seventy-nine enthusiastic classmates, spouses, and friends had dinner together at the Harvard Club. It seemed there was so much to say and time was so short. Fortunately 39 were able to extend the visit to the Wequassett Inn over the weekend. There, we were treated very well. Bill Downey's piano and the class singing even drove the last of the rain away from Cape Cod!

The wildly varying things that this handsome, beautiful, brave, dear group is doing should be written down, but, there is no room here even to begin. So, let's draw together again at the 45th to share more of our special time. Those not present were sorely missed, and were much in mind.

—Morgan Vigneron '49

35th Reunion

Our class reunion was the best attended of any this weekend! Fifty-eight of our class, plus spouses and friends, got together. The usual cheerful and relaxed give-and-take prevailed, despite the drizzle that began on Wednesday and lasted until Saturday afternoon.

Thursday saw us in the amphitheaters in the morning and afternoon for the scientific symposia, with lunch under the tent on the Vanderbilt Hall tennis court (no warming fire necessary). That night we had cocktails, conversation and dinner at the Boston Harbor Hotel,

looking out on Rows Wharf and the Boston Harbor.

By the next morning clear heads reconvened for the Alumni Day program in the quadrangle. After the morning talks, (particularly on ethics), presentation of prize essay awards to medical students, reports by Dean Tosteson and the alumni survey and symposium committees, and a short business meeting chaired by Doris Bennett, in which the minutes of the previous meeting were overwhelmingly approved as not read, we got together again for lunch in the tent on the quadrangle, stood for a picture of the class,



and then drove off to the Stage Neck Inn in York Harbor, Maine. Tom O'Brien and Stanley Goldstein took over for a happy informal discussion after an excellent dinner. Art Garceau presented the Silver Spoon Award to Pete Crowe and Bud Vine for being the least changed in appearance.

Saturday dawned cloudy and rainy, so plans for tennis were cancelled. Some swore that they went to play golf. Some hiked along the shore (good surf), gossiped, or drove up to Kennebunkport (a short distance) but were not invited to visit Mr. Bush.

Saturday night we had a clambake-under-roof—a little too loud and busy to chat much, but memorable. The maitre d' did well to get the full course of clams, corn, lobster and watermelon to us all despite being surprised at our number. After the clambake, we spent time together in the hotel until early morning hours.

The Sunday morning sun brightened our last breakfast—the last together for another five years—and many found it hard to leave. On to 1994!

—Richard E. Senghas, MD '54

30th Reunion

The 30th reunion of the Class of '59 began on a cold, wet New England day. However, the class dinner at the Union



Club Thursday night warmed up the more than 80 attendees. Jack McPeck informed us that The Union Club had been formed by northern sympathizers at the start of the Civil War—a fact that was noted with disdain by confederates Cage and Dixon.

Friday the weather was so discouraging that even some who sat through the morning's events at the quadrangle didn't stay for the picture-taking that afternoon. Nevertheless, close to 70 intrepid souls drove through the downpour to Weekpaug, Rhode Island to enjoy what turned out to be a gorgeous weekend at the Inn.

The athletes among us, i.e., Bob Carey, Bob Blacklow, Dick Sanderson, Jim Barrett, Herb Lessow, Jim Prichard and Bob Goldstone played tennis with abandon. Wives joined them for mixed doubles. Other classmates and spouses took walks on the beach, trips to Mystic Seaport or a plunge in the Atlantic. And everyone talked and talked and talked.

Jim Sidd led us in a toast of appreciation to Jack and Corrie McPeck for their superb job arranging the weekend for the class. Judy Livant Rapoport, speaking for herself, Sally Esselstyn Howell and Kitty Beck Kris toasted the males of the class, who never questioned the appropriateness of women in medicine and always gave support to their female classmates. An extended and dramatic game of *Trivial Pursuit* later that evening demonstrated their

faith was well-founded when the women (classmates and wives) emerged victorious over the men.

Sunday saw us gradually depart, not only for those states east of the Hudson River but also for such exotic places as Arizona (Burkhardt and Sanderson), California (Urquhart), Michigan (Steinhauer), Florida (Esselstyn, Howell), Wisconsin (Litwin), South Carolina (Dixon) and Pennsylvania (Engelman). Everyone agreed the warmth, wisdom and wit of the Class of 1959 haven't diminished, even if other functions have.

—Ira Marks '59

25th Reunion

Some 75 classmates celebrated our 25th reunion, traveling back in time and space to ceremonies held around the well-known anatomical landmark and omphalic symbol, 'The Circle of Tugo' (for those HMS'ers not privileged to take the freshman year anatomy course with the Class of '64, the C of T is of course the circle in front of Vanderbilt Hall).

The reunion began on Thursday, when 14 classmates presented in the scientific symposia program for the HMS alumni. The main topics of neuroscience and of the public health/orga-

nizational aspects of medicine emphasized the academic interests of our class, which counts at least 30 full professors.

Credits were given to Stephen Kuffler and his 'neurobiology gang' for their influence. As we sat again as a class in Amphitheater E, as we had done sophomore year, our thoughts drifted back to our total perplexity before a sophomore neuropathology exam, so obscure that questions were on footnotes to footnotes in our 500-page syllabus, and to the great murmuring and grumbling that arose, curtailed only by Phil Zimmerman's cry, 'Shut up and compete!' We also thought, "Pogo'esquely," in regard to the medical establishment who used to lecture to us, how 'we is become them.'

After this edification and *recherche à temps perdu* we congregated for conversation, cocktails and our class dinner at the Alexander Parris Room in Quincy Market. Before dinner, the 120 class members and guests paused in silent remembrance of our deceased classmates: Sam Latt, Jack Ream, Michael Sherwood (Schefrin), Wes Thum and Bill Wallin. We continued the process of re-unioning and renewing old ties. A.W. Karchmer told us that 73 percent of us had given to the Alumni Fund, and, although this was an unusually high percentage, he was still on the track of the rest. Mike Rasminsky shared the janitor's review of our second year show, 'not necessarily the best, but certainly the dirtiest.'

Alumni Day was highlighted by presentations by classmates Nancy Kaltreider, Jim Sabin and Bob Lawrence (see texts in this issue) and by weather so cold and blustery that many of us remembered well why we had left New England. Those of us that had stayed felt a special kinship with Puritan hardiness and prayed there was still virtue in undergoing adversity.

After a classic dark and stormy night, New England weather, quixotic as ever, turned gloriously sunny for our Saturday and Sunday at New Seabury on the Cape. Semi-athletic feats and events abounded, including jogging, swimming and the now traditional Jackman-McCarley reunion tennis match. The clambake on Saturday, attended by 64 '64 classmates and guests, extended late into the evening and was the highlight of the weekend. For the organization of these events, thanks were expressed to the reunion committee (Don Bienfang, Paul Bittenwieser, Dave Chapin, Bob Hopkins, Joe Hurd, A.W. Karchmer and your correspondent).

Leisurely conversations continued to show that we, at the mature medical

school age of 25, were most intrigued by the varied life experiences of our classmates—our ups, downs and other adventures. In terms of professional careers, we found that classmates in solo or small group private practices expressed the most acute sense of medicine's change from that contemplated in medical school, with a growing encroachment of governmental/insurance regulation and the threat and actuality of malpractice suits. Classmates in large group or HMO practices and in academic medicine were much happier with the match of their present career and their expectations as HMS students. All were buoyed by our sense of communality in HMS '64, by our bonding in the years of intense growth and change as students.

On a bright Sunday morning, our band of time-travelers, ties renewed and deepened, exchanged goodbyes and departed, with thoughts and plans for the 30th reunion. Mark your calendar for June 1994!

Robert McCarley '64

20th Reunion

Twenty-two members of the Class of '69 participated in all or part of the reunion weekend. We began with dinner

Thursday night in the 'shabby gentility' of the Tavern Club. The setting and round table format were conducive to a post-prandial series of unrehearsed and wonderfully personal and nostalgic vignettes by each classmate present. Friday, a few hardy souls braved the cold and rain to attend Alumni Day in the quadrangle, and fewer still drove in monsoon conditions to Chatham Bars Inn on Friday night. Happily, our numbers were expanded the next day and the sun shown on us for a day of golf, biking and walking, culminating in a clambake on the beach. By Sunday, we all felt like we'd been together for the past 20 years, as old friendships were renewed and new ones made with spouses and children. Certain themes were recurrent in our discussions: the value of change in one's professional and personal life, the importance of balance and perspective, and happily (and perhaps surprisingly) a generally optimistic view about the future. Special kudos to those who traveled great distances to participate: Felicia Stewart, the Lemkins and the Kabins from California, the Stephens from Texas, the Krogstads from St. Louis, Don Straight from Nigeria, and the Arlings, Silvios and Lewises from D.C. We are already enthusiastically planning the 25th and hope that a much larger percentage of the class will get to share the pleasure that we experienced on the 20th.

—George E. Thibault '69



15th Reunion

The Class of '74 held its 15th reunion dinner on Friday, June 9th, at the Downtown Harvard Club of Boston. Long distance travel awards went to the California trio of Larry May, Chris Rose and Tim Russell. Other classmates at the dinner were David Blumenthal, Carolyn Compton, David Koh, Jim Higgins, Ferrol Lee, Jamie Maguire, Al Margulies, Jim Marsh, Tom Najarian, Jane and Peter Newburger, Richard Rose, Margaret Ross, Gloria Singleton-Gaston, Jeff Speller, Doug Taylor and Russ Vasile. The big news of the evening was that the 'class baby', Nova Najarian, is about to enter college. There was general agreement that none of us (Tom and Sina included) looked old enough to have a child in college. May we continue to age well!

—David Calkins '74

10th Reunion

It was fun. At the reunion cook-out Cheryl Warner summed it up nicely: "We're calmer, more secure, more comfortable with ourselves, more mature." Now, the night before the picnic, Liz Kincannon and I did sneak into Leo Troy's bedroom and hide all his socks and underwear for old time's sake (under the sink in the bathroom downstairs, if you're still looking, Leo . . .), but we all did seem more content and relaxed. We're all a little more like Chris Doyle these days. The picnic was bursting with energy, though, mostly from our kids with us chasing after them to make sure Mary Hoyt Briggs' tractors, toys, and homestead went relatively unscathed. (Thanks for the great location and fabulous weather, Mary!) It was fun to try and match classmates with their kids. Ben and Alex Ingard looked much like John; daughter Rebecca looked incredibly like mom Lynn Ruff; kiddoes Joshua and Bara had the hair and smile of dad Dan Fintel.

People looked good and mostly the same (although medical students do keep looking younger). Gerry Aurigemma and Mike Hirsh have closer crops. Andy Satlin has finally been able to grow a moustache (and said it took him the whole 10 years to do it). Debbie

Atwood looked wonderful, and except for the crutches, one would never suspect the terrible events of Kim and Debbie's lives from which they have so amazingly recovered and prospered.

We caught each other up on who was where and doing what. Matt Breyer is not unknown but now in Chicago . . . no, Texas . . . no, North Carolina . . . There were many psychiatrists among us: Allison Doupe, Andy Satlin, Anthony Van Neil, Dan Rome, Jeff Jonas and myself. We introspected why so many had ended up in the field. Jeff Jonas answered because he could now live in a resort area year round. He then offered us jobs. HMS Hyannis . . . hummm. Others, including Jean Ryan and Mary Hoyt Briggs, wondered why they'd chosen ob/gyn, now trying to balance families, on-call and surgery. Too bad we didn't get counselling in school about what real life might be like when we grew up. It was good to see folks come from distances: Gary Jones from Oregon with pediatrician-wife Sara; Liz Kincannon from San Diego with Indiana Jones-type husband Pat; and Rhonda Rand from Beverly Hills where she soothes the skins of stars. Paul Yock (not completely lost as listed in the report) called from San Francisco during the reunion to admit he was thinking of and missing us. Leona Brenner also called to say she wished she could have come to shmooze with old friends about past Vanderbilt Hall shenanigans. I called Kathy Bloomer and Ed Wienberger to learn that Kathy and kids are doing well and that Ed is still



as delightfully "eccentrique", shall we say, as ever. Nonetheless, this year Ed received the teacher-of-the-year award at University of Washington Medical School. (Momma's proud, Ed!)

People enjoyed the chance to see each other and visit, even if briefly. The time together went too quickly. We are all too busy. As Jim Kirshenbaum said as he left: "Great picnic! Wonderful to visit with you! See you in five years! Have a good life!"

—Susan Witkie '79

5th Reunion

Our fifth reunion blew by sooner than we expected, and thanks to Wendy Love's efforts, we were able to mark its passing together over drinks and dinner at the Harvard Club.

During a meal punctuated by waitresses auditioning for "The Flying Wallendas," we caught up with our friends. Amy Ryan, escorted by a South African rugby star, is passionate about golf and pediatrics. Matt Dougherty and Sue, up from Down Under, prepare for a final year of general surgery residency at MGH. Ed Hundert and Mary are on the academic fast track at McLean. Lookin' good Ed. Vinh Tran is content with wife Judy and their new baby, and works at Doheny Eye Institute in L.A. John Stogin and Laurie are expecting any day now. Eric Gainsler is extolling the virtues of the city by the bay. Stephen Kamin supervises a residency program in neurology. Karen Victor, world traveller, is back at the university health service. Mark Wenneker is balancing health policy and patient care responsibilities. Alan Yeung is getting invasive in his cardiology fellowship at the Brigham and Women's Hospital, and Michael Chang is finishing up at the Eye and Ear.

There goes the beeper, a new intern is covering the house tonight, gotta go. See you at the 10th.

—Redmond Burke '84





The Travel Program Of Alumni Flights Abroad



This is a private travel program especially planned for the alumni of Harvard, Yale, Princeton and certain other distinguished universities. Designed for the educated and intelligent traveler, it is specifically planned for the person who might normally prefer to travel independently, visiting distant lands and regions where it is advantageous to travel as a group. The itineraries follow a carefully planned pace which offers a more comprehensive and rewarding manner of travel, and the programs include great civilizations, beautiful scenery and important sights in diverse and interesting portions of the world:

TREASURES OF ANTIQUITY: The treasures of classical antiquity in Greece and Asia Minor and the Aegean Isles, from the actual ruins of Troy and the capital of the Hittites at Hattusas to the great city-states such as Athens and Sparta and to cities conquered by Alexander the Great (16 to 38 days). **VALLEY OF THE NILE:** An unusually careful survey of ancient Egypt that unfolds the art, the history and the achievements of one of the most remarkable civilizations the world has ever known (19 days). **MEDITERRANEAN ODYSSEY:** The sites of antiquity in the western Mediterranean, from Carthage and the Roman cities of North Africa to the surprising ancient Greek ruins on the island of Sicily, together with the island of Malta (23 days).

EXPEDITION TO NEW GUINEA: The primitive stone-age culture of Papua-New Guinea, from the spectacular Highlands to the tribes of the Sepik River and the Karawari, as well as the Baining tribes on the island of New Britain (22 days). The **SOUTH PACIFIC:** a magnificent journey through the "down under" world of New Zealand and Australia, including the Southern Alps, the New Zealand Fiords, Tasmania, the Great Barrier Reef, the Australian Outback, and a host of other sights. 28 days, plus optional visits to South Seas islands such as Fiji and Tahiti.

INDIA, CENTRAL ASIA AND THE HIMALAYAS: The romantic world of the Moghul Empire and a far-reaching group of sights, ranging from the Khyber Pass and the Taj Mahal to lavish forts and palaces and the snow-capped Himalayas of Kashmir and Nepal (26 or 31 days). **SOUTH OF BOMBAY:** The unique and different world of south India and Sri Lanka (Ceylon) that offers ancient civilizations and works of art, palaces and celebrated temples, historic cities, and magnificent beaches and lush tropical lagoons and canals (23 or 31 days).

THE ORIENT: The serene beauty of ancient and modern Japan explored in depth, together with the classic sights and civilizations of southeast Asia (30 days). **BEYOND THE JAVA SEA:** A different perspective of Asia, from headhunter villages in the jungle of Borneo and Batak tribal villages in Sumatra to the ancient civilizations of Ceylon and the thousand-year-old temples of central Java (34 days).

EAST AFRICA AND THE SEYCHELLES: A superb program of safaris in the great wilderness areas of Kenya and Tanzania and with the beautiful scenery and unusual birds and vegetation of the islands of the Seychelles (14 to 32 days).

DISCOVERIES IN THE SOUTH: An unusual program that offers cruising among the islands of the Galapagos, the jungle of the Amazon, and astonishing ancient civilizations of the Andes and the southern desert of Peru (12 to 36 days), and **SOUTH AMERICA,** which covers the continent from the ancient sites and Spanish colonial cities of the Andes to Buenos Aires, the spectacular Iguassu Falls, Rio de Janeiro, and the futuristic city of Brasilia (23 days).

In addition to these far-reaching surveys, there is a special program entitled "EUROPE REVISITED," which is designed to offer a new perspective for those who have already visited Europe in the past and who are already familiar with the major cities such as London, Paris and Rome. Included are medieval and Roman sites and the civilizations, cuisine and vineyards of **BURGUNDY AND PROVENCE;** medieval towns and cities, ancient abbeys in the Pyrenees and the astonishing prehistoric cave art of **SOUTHWEST FRANCE;** the heritage of **NORTHERN ITALY,** with Milan, Lake Como, Verona, Mantua, Vicenza, the villas of Palladio, Padua, Bologna, Ravenna and Venice; a survey of the works of Rembrandt, Rubens, Van Dyck, Vermeer, Brueghel and other old masters, together with historic towns and cities in **HOLLAND AND FLANDERS;** and a series of unusual journeys to the heritage of **WALES, SCOTLAND AND ENGLAND.**

Prices range from \$2,225 to \$5,895. Fully descriptive brochures are available, giving the itineraries in complete detail. For further information, please contact:

Alumni Flights Abroad

Department HMS 40
A.F.A. Plaza 425 Cherry Street
Bedford Hills, NY 10507
TOLL FREE 1-800-AFA-8700
N.Y. State (914) 241-0111